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A STUDY OF THE RELATIONSHIPS BETWEEN
THE BROKEN HOME AND THE SCHOOL

by

EDWARD R. MATTIX

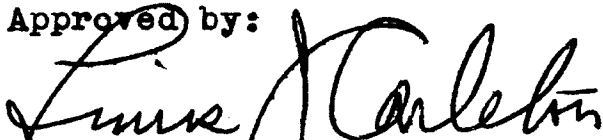
B.S. Ed. Western Montana College of Education, 1952

Presented in partial fulfillment of the requirements for the
degree of Master of Education

MONTANA STATE UNIVERSITY

1958

Approved by:


Chairman, Board of Examiners


Dean, Graduate School

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CHAPTER I

INTRODUCTION

Significance of the problem. Psychologists in general, and particularly those specializing in the field of child study, emphasize the tremendous importance of the home as the medium for the proper growth and development of the personality and character of the child.¹ Conflicts may develop between parent and child out of any of the crises of life, but no child can develop normally in a family torn with tension between parents.² Death gives rise to problems in the adjustment between parent and child because it causes an instability in the conduct of the remaining parent.³ If the home is viewed as a continuous chain of learning situations, the father and the mother must be considered as occupying the very center of these situations, and the broken home presents a fundamental change in the conditions for learning.⁴

¹Nehemiah Wallenstein, Character and Personality of Children From Broken Homes. (Bureau of Publications, Teacher's College, Columbia University, New York City, 1937), p. 3.

²Ernest R. Mowrer, Family Disorganization. (The University of Chicago Press, Chicago, Illinois, 1939), pp. 213-17.

³Ibid.

⁴Maurice Newburger, "The School and the Maladjusted Child," The Child, 17:14-21, January, 1948.

Importance of the problem. When this country was first founded, the home was an almost self-sufficient economic, social, recreational, and spiritual unit. Due to national growth, the building of large cities, extensive trade, industrialization, diversified labor, and more complex government, the family unit has gradually become less influential. Accompanying this decrease in importance, many homes tend to break up and crumble through separation, desertion, divorce, and of course, through the ever present factors of mental and physical sickness, and death.⁵

The problem. Very often the children that come to the attention of teachers, administrators, and children, are the problem children of the school.⁶ Is it true, as the consensus among teachers and administrators seems to indicate, that adverse home conditions are related to adverse school achievement?

Do social factors of unsettled homes, adopted children, social status, mobility of the family, type of neighborhood and neighbors, companions and others, have discernible influence upon the teaching and learning process in

⁵Lester Beals, "A study of Certain Home Factors and Their Relationship to the Personal Adjustment of Children," School and Society, 72:55-57, July, 1952.

⁶Robert H. Berge, "A Study of Children From Broken Homes in the Elementary School," (unpublished Master's Thesis, Montana State University, Missoula, Montana, 1950), pp. 1-4.

school life?

Purpose of the study. The purpose of this study was to determine the extent to which the broken home affects the adjustment to school life of students in the Paris Gibson Junior High School, Great Falls, Montana.

The main problem of the study was to examine the students from broken and non-broken homes in order to determine if there were any differences in grade point average, intelligence quotient, grade equivalent, promotion, attendance, and age. A subsidiary phase of this study was to ascertain the incidence of broken homes among the junior high school population, including an analysis of the various types of broken homes.

General assumptions. If the home is the immediate agency which culturally, socially, and economically prepares the children for general society, the broken home may be compared to a yard with a broken fence which provides less protection for those inside, so that they are more likely to fall out or go astray.⁷

The accumulative record is made use of in most schools. The assumption must be made that the results of achievement tests, intelligence tests, and other information on the accumulative records are sufficiently accurate

⁷Wallenstein, op. cit., p. 5.

as to show what they were intended to show.

Possible hypothesis. The many aspects and ramifications of the broken home suggest that the broken home presents a fundamental change in the conditions for learning; that is, the character of broken home children, as far as it is a product of learning at home, will, other things being equal, be different from the character of other children. It is not inconceivable, however, that the many disadvantages confronting the broken home child may in themselves bring about certain compensatory elements which will result in comparative superiority in some traits. All elements taken into consideration, the broken home will certainly have some effect upon the child's achievement in school.

Delimitations. This study was limited to the Paris Gibson Junior High School, Great Falls, Montana. All of the students in this school were in the seventh and eighth grades. The subjects in this study were from broken homes. One hundred students, chosen by random sampling from the non-broken homes, were used as a control group.

Limitations. The restricted area the subjects were selected from, and the number used in this study, prohibit the making of broad generalizations. Generalizations developed may be applicable only to the population involved in this study.

Although records of students were checked and re-

checked, there is the possibility, with some of the very complex home situations of marriage, re-marriage, and adoption, that some of the broken home cases were overlooked.

Definition of Terms Used.

Broken homes. For the purpose of this study, a broken home is defined as a home impaired in its normal biological set-up as a result of death of either one or both parents, divorce, separation or desertion of either one or both parents.

Students of broken homes, or broken-home students. These terms refer to children who have the misfortune to live and develop for a period of their lives in a family environment lacking one or both of the parents because of death, divorce or separation.

Non-broken home. The non-broken home is defined in this study as a home where both parents are alive, and live together with their children.

Non-broken home students. Those children who come from homes where no overt breach in the family has taken place as a result of divorce, separation, or death.

Junior high school. In this study will refer to the seventh and eighth grades of Paris Gibson Junior High School.

CHAPTER II

REVIEW OF THE LITERATURE

The sources of maladjustment of school-age children are varied and numerous. One of the sources, the broken home, has not as yet been thoroughly studied in accordance with up-to-date standards of research. Most of the studies that have been done extend into the fields of medicine, sociology, welfare, adoption of children, institutional care and foster parents and homes, psychology, judicial and other fields. However, very few of the writings concern themselves directly with the problems involving the child of the broken home and his adaptability to the present educative process.¹

Campbell² summarizes several investigations; four dealing with public school children and one with institutional cases. In one study, the author investigated 185 boys in the seventh grade of a junior high school. Thirty-four out of the 185 boys were found to have come from broken homes. These 34 cases represented all types of

¹Robert H. Berge, "A Study of Children From Broken Homes in the Elementary School," (Unpublished Master's Thesis, Montana State University, Missoula, Montana, 1950), p. 13.

²Marion Wendlen Campbell, "The Effect of the Broken Home Upon the Child in School," Journal of Educational Sociology, 5:274-281, January, 1932.

broken homes and a gross and matched comparison was made. For the matched comparison the groups were matched as to chronological age, I.Q., and roughly for home conditions as passed upon by the assistant principal of the school. The broken-home group was compared with the normal-home children for their achievement quotients as found on the school records. The author does not give the significance of the differences found in favor of the normal-home group.

In another investigation, Campbell compared the average achievement quotients of 60 broken home children found in the various sixth grades of the same city, with those of 87 normal-home children taken at random from the records of the same schools. The findings were slightly in favor of the normal-home group; however, the significance of the difference was not presented.³

The third investigation deals with 29 girls reported as behavior problems by the attendance officer of the public school system in a large city. Fifty-nine per cent of these girls were found to have come from broken homes. This fact, according to the author, "indicates that there may be a relationship between the broken home and conduct disorders."⁴

The fourth study dealt with 27 girls in a junior

³Ibid., p. 7.

⁴Ibid., . . .

high school who came from homes broken by divorce. Of these 27, only four were ever reported as educational problems and only three as conduct problems. On the basis of this finding, Campbell concludes that since the separation in the homes of these girls was of long standing, the results indicate that the average child is not affected by a broken home, either in conduct or school achievement, after the period of intensive stress has passed.⁵

In the investigation made of institutional cases, Campbell studied 64 boys for their improvement in school achievement after their arrival at the institution. It was found that in 62 per cent of the cases, school work improved somewhat after adjustment to the new home was made. In the opinion of the author, the fact that such a high percent of the children showed improvement in school work "when restored to the equivalent of a normal-home atmosphere, indicates that.....broken homes may have a deleterious effect upon school work at the time when the child is under the stress of the broken-home situation, but not after the acute point of the situation has passed." In other words, the broken home has no permanent effect on the child so far as his academic standing is concerned.⁶

⁵Ibid., p. 11.

⁶Ibid., p. 13.

Crosby⁷ reports a statistical study made of 314 delinquent boys appearing before the Alameda County Juvenile court. Of these boys 45.5 per cent of the total were found to have come from broken homes. The records of these boys were compared with the records of the delinquent boys who came from non-broken homes. The author found, among other things, that charges of violation of property and motor vehicle laws, and "disturbing the peace" were listed more frequently against the complete home delinquents, while charges indicating lack of personal self-control, such as incorrigibility, rape, truancy, and "danger of leading an idle, dissolute, and immoral life", were more frequently brought against the broken-home delinquents.⁸ Crosby also found that "there is little or no correlation between parental conditions and the amount of formal education which these boys had received,"⁹ that a greater per cent of the broken-home delinquents had an employment record and that boys from homes where the mother was absent showed the highest percent of employment.

⁷ Stanley Crosby, "A Study of Alameda County Delinquent Boys, with Special Emphasis Upon the Group Coming From Broken Homes," Journal of Juvenile Research, 13:220-230, July, 1929.

⁸ Ibid., p. 221.

⁹ Ibid., p. 228.

Despert,¹⁰ Hopkirk,¹¹ Bossard,¹² Reuter and Runner,¹³ and Rochford¹⁴ are of the opinion that divorce is not another word for disaster. Divorce is an unhappy experience, but need not be either a bad thing or a good thing. It is only what the human beings involved may make of it.

Berge¹⁵ found that the outstanding common trait of children from broken homes was emotional disturbance. However, there seemed to be no differences in scholastic attainment. The children from broken homes were not absent or tardy any more or less than children from normal homes, and their school work ranged from excellent to failure, the same as for any other students. Berge concludes that the children of broken homes need special consideration and understanding, and schools must try to help improve their lives.¹⁶

¹⁰J. Louise Despert, Children of Divorce (New York: Doubleday and Company, Inc., 1953), 282 pp.

¹¹Howard W. Hopkirk, Institutions Serving Children (New York: Russel Sage Foundation, 1944), 228 pp.

¹²James H. S. Bossard, Parent and Child, (University of Pennsylvania Press, Philadelphia, 1953), 303 pp.

¹³Edwin B. Reuter and James R. Runner, The Family: Source Materials for the Study of the Family and Personality. (New York: McGraw-Hill Company, 1931), 281 pp.

¹⁴Elbrun Rochford, Mothers on Their Own. (New York: Harper and Brothers, 1953), 210 pp.

¹⁵Berge, op. cit., 113 pp.

¹⁶Ibid., p. 113.

Curtis and Nemzek¹⁷ divided broken homes into six classes in investigating the relation of unsettled home conditions to the academic success of the pupils. The following classes were considered broken home conditions: loss of father by death, divorce or separation, unemployment of the father, loss of the mother by death, or employment of the mother outside the home. The 600 pupils were paired with pupils from normal homes on the basis of intelligence, chronological age, grade in school, sex and nationality. An honor point average based upon the teachers' marks was computed for each of the pupils and used as a measure of academic success. The comparisons indicated that the school achievement of pupils from broken homes was inferior to that of pupils from normal homes.

Risen¹⁸ found that the absence of one or both parents affected the child's intellectual functioning unfavorably, increased the number of failures in school subjects, and increased the child's likelihood of becoming a problem for the school counselor. In the boarding school, the boys

¹⁷Erta Curtis and Claud Nemzek, "The Relation of Certain Unsettled Home Conditions to Academic Success of High School Pupils," Journal of Social Psychology, 9:419-435, November, 1938.

¹⁸Norman Risen, "Relation of Lack of One or Both Parents to School Progress," Elementary School Journal, 39:528-531, October, 1939.

from broken homes were characterized as having more behavior, emotional, social, and health problems than an equivalent group of boys from non-broken homes.

Wallenstein¹⁹ attempted to examine by means of quantitative measurement, the commonly alleged proposition that children from broken homes are different in certain aspects of character and personality from children of normal homes. A secondary phase of the study was to ascertain the incidence of broken homes among the elementary school population, including an analysis of the various types of broken homes.

The study involved 3,131 children in schools in Manhattan, Brooklyn and Jersey City. The children were grouped by: parents, step-parents, nationality, socio-economic status, intelligence, age, school and home adjustment, honesty, personality, superstitions, reputation, and character. Matched comparisons were made between the children of broken homes and non-broken homes. The author indicated the following features of the study: the provision for control groups in all comparisons, a series of gross as well as a series of matched comparisons made between broken home and non-broken home children, distinctions made between the different types of broken homes, the majority of the comparisons made were in numbers approaching or

¹⁹Wallenstein, op. cit., 89 pp.

exceeding 100, a large number of measures were employed, and rigorous and complete statistical methods and procedures were used. Wallenstein states that:

The child living in a normal home, though usually unaware of the fact, is permeated with the wholesome feeling of belonging to an intact protective group. On the other hand, it is reasonable to suppose that the child of a broken home is constantly aware of the fact that he belongs to an impaired organism, and is therefore irrevocably "different" from other children. This awareness may lead to emotional disturbances and bad mental hygiene, even in cases where the status of the family did not change in any other way after the fatal impairment of the home. From this point of view, the child may, hypothetically, develop a chronic depressive feeling of "brokenness", inferiority, insufficiency, precariousness, insecurity.²⁰

In speaking of children from broken homes, "it is necessary to keep in mind that we are here dealing not with one homogeneous group but with several groups."²¹ There are grandparents, aunts and uncles, and a married brother or sister who may enter as the replaced parent. The step-parent who appears in the broken-home situation introduces still another set of factors to be dealt with.

Wallenstein found that a total of over 17 per cent of the school children for all nationalities and both sexes came from broken homes. One half of the colored group in school came from broken homes. On the whole, children from broken homes, especially those from homes broken by

²⁰Ibid., p. 4.

²¹Ibid., p. 5.

death, were retarded in school grade when compared with normal home children. The mean I.Q. for children from homes broken by death was definitely lower than that for the normal home children. For all matched comparisons, the children of broken homes had less success in adjusting to school life. The children of broken homes were more superstitious and had a tendency toward the extremes of extroversion and introversion. The results of the emotionality test indicated that the emotional and neurotic tendency was more common in broken-home cases than in normal-home cases. The school adjustment rating by teachers favored the normal home. In attentiveness, the children from normal homes rated higher. There was an over-all tendency for the broken home children to be at a disadvantage scholastically.

The author concludes that the mere fact that the home is broken does not indicate that the unfortunate child is doomed to absolute failure in school, but rather the broken home seems to have a varying effect on school work, character, personality and emotional disturbances. According to Wallenstein, the child of a broken home does not suffer permanent impairment of school work.

Shaw and McKay²¹ compared the records of each of

²¹Clifford Shaw and H. D. McKay, "Are Broken Homes a Causative Factor in Juvenile Delinquency?" Social Forces, 10:514-524, 1932.

two groups of delinquent boys with the records of a group of boys in the public schools for incidence of broken homes. One of the delinquent groups consisted of 1,675 cases and the other, 1,596 cases, and the non-delinquent group comprised 7,278 children. After statistically allowing for the differences in nationality and age which they found between the delinquents and the non-delinquents, the authors concluded that the rate of broken homes for the two delinquent groups exceeded the rate of broken homes for the public school group by only 6.4 per cent and 5.9 per cent respectively. Accordingly, they infer that delinquents and public school children are not significantly different as to the incidence of broken homes. The authors specify that "it should be borne in mind that the cases of delinquents used in this comparison were largely serious gang offenders."²² While no very significant differences were found between the rate of broken homes in this series of delinquents and the control group, it is possible there might be very significant differences between groups of boys who present personality problems and a group of school boys of the same age and nationality.

That children coming from homes torn with strife, tension, and disaster are less likely to succeed in school

²²Ibid., p. 523.

than children from normal homes finds Gustad,²³ Thorman,²⁴ Wittels,²⁵ and Zada,²⁶ in agreement in articles discussing the effects of a broken home on the child.

²³John W. Gustad, "Factors Associated with Social Behavior and Adjustment; A Review of the Literature," Educational and Psychological Measurements, 12:3-19, Spring, 1952.

²⁴George Thorman, "Broken Homes," Public Affairs Pamphlet No. 135, Public Affairs Committee, 1947, 31 pp.

²⁵Fritz Wittels, "The Children of Divorced Parents," Child Study, May, 1930.

²⁶Nona M. Zada, "Case Studies: Bad Start in Life," Understanding the Child, 2:58-61, April, 1952.

CHAPTER III

PROCEDURES

Collection of Data

Discovering the broken home. A questionnaire¹ was prepared and distributed to each of the 37 home room teachers in the Paris Gibson Junior High School. They were asked to administer these to all of the students in their home rooms. The students were required to fill out the questionnaire in the presence of the teachers who explained any questions which happened not to be clear to any of the students.

Since it was important that the answers be correct and complete, all of the school permanent records were checked. Where there was a discrepancy in the information, the student concerned was interviewed to determine the correct home status. This information, as well as each student's name and group number, was placed on five by seven cards. The five by seven cards were designed to contain all of the home status and school information on one side in separate sections for greater ease in tabulation.²

Socio-economic status. To determine the socio-economic status of the students, they were asked for the

¹See Appendix A.

²See Appendix B.

occupation of their father and to give a brief description of just what he did in regard to his occupation. The students whose fathers were dead, were instructed to state the occupation of the father when alive. The occupational classification was determined by the Dictionary of Occupational Titles.³

Intelligence. As a measure of intelligence, the Otis Beta Quick Scoring Mental Ability Test was used. This test of mental ability is administered annually to all seventh grade students in Paris Gibson Junior High School.

Age. The age of each student was obtained from the school permanent record file.

Scholarship. The record of scholarship of each student was obtained from the school permanent record file which is kept in the office and is available to all teachers.. The grades are recorded on the permanent record cards by home room teachers at the end of each semester. The following letter grading system is used: A--Superior, B--Good, C--Average, D--Lowest passing mark, and F--Failure.

Attendance. The record of attendance was obtained from the attendance record cards which are kept by the attendance officer at the school.

³United States Department of Labor, Dictionary of Occupational Titles, Vol. II (Washington: Government Printing Office, 1949).

Failures. The number of times that the students repeated grades in school was obtained from the school permanent record file.

Study habits, attitude and citizenship. The study habits, attitude and citizenship rating was obtained from the permanent record file. The students were rated by all of their teachers and these ratings were summarized and placed on the permanent record cards by the home room teachers. Each student was rated in each category as (1) Excellent, (2) Good, (3) Fair, and (4) Poor.

Discipline. A record is kept in the principal's office showing the names of problem students, their offenses and the action taken. To determine to what extent the problems of discipline and the broken home were related, these students were checked against this list.

All of this information concerning scholastic and social achievement at school was placed in the school section of the five by seven information cards.

Selection of the Control group. Random samples of the remaining student population of the Paris Gibson Junior High School were selected to comprise the control group or the non-broken home group. At the time of the sampling there were 1,127 students enrolled in the school. Of these students, 819 were from non-broken homes and 308 were from broken homes. The determined number to make up the control

group was 100.

The attendance cards, which are kept in the principal's office in alphabetical order, were used to select the control group. In order to maintain a random sampling, every eighth student of the remaining non-broken-home population was selected as follows:

The first number selected was chosen by lot. Nineteen equal size pieces of paper, numbered one to nineteen, were placed face down in a box. After thoroughly mixing the nineteen sections, one was removed from the box. The number selected was six. Consequently, every eighth name from the originally drawn number was a participant. Thus the students selected were numbered 6, 14, 22, 30, etc.

After the desired number of students was selected, the name and group number of each was placed on a five by seven card, and the necessary information collected from the permanent record files.

Treatment of the data

The students in this study were classified as follows:

↓ a. Sex

- (1) Boys
- (2) Girls

↓ b. Grade

- (1) Seventh grade
- (2) Eighth grade

c. Age

- (1) Sixteen years
- (2) Fifteen years
- (3) Fourteen years
- (4) Thirteen years
- (5) Twelve years
- (6) Eleven years

d. Home status

- (1) Home broken by divorce
- (2) Home broken by death of father
- (3) Home broken by death of mother
- (4) Home broken by separation
- (5) Home unbroken

e. Adults with whom the student lives

- (1) Mother
- (2) Father
- (3) Mother and stepfather
- (4) Father and stepmother
- (5) Relatives
- (6) Foster home

f. Occupation⁴

- (1) Professional and Managerial--0
- (2) Clerical and Sales--1
- (3) Service--2
- (4) Agriculture--3
- (5) Skilled labor--4-5
- (6) Semiskilled labor--6-7
- (7) Unskilled labor--8-9

g. Grades repeated

- (1) Repeated one grade
- (2) Repeated more than one grade

h. School adjustment

- (1) Study habits
 - (a) Excellent
 - (b) Good
 - (c) Fair
 - (d) Poor

⁴Ibid., p. 4.

- (2) Citizenship
 - (a) Excellent
 - (b) Good
 - (c) Fair
 - (d) Poor
- (3) Attitude
 - (a) Excellent
 - (b) Good
 - (c) Fair
 - (d) Poor

J
i. Attendance

- (1) Days absent
- (2) Times tardy

j. Intelligence quotient

k. Grade point average

- (1) A--4
- (2) B--3
- (3) C--2
- (4) D--1
- (5) F--0

l. Grade equivalent

- (1) At 6.5
- (2) At 8.5

The data ~~was~~ then divided into two sections: (1) The distribution of age, grade, sex, type of broken home, adults with whom the student lives, occupation of father, grades repeated, attendance and school adjustment ; (2) Intelligence quotient, grade point average and grade equivalent.

The first section was treated by comparison of sex in tabular form showing the number of cases and the percentage within each group.

The second section was statistically treated by sex, and in the cases of grade point average and grade equivalent, by type of broken home, adults with whom the student lives

and occupation of father. This procedure was carried out for both broken and non-broken homes. The mean, the standard deviation from the mean and the standard error of the mean were computed for each compare group. The data were then statistically treated to determine whether or not the observed difference between means of the compared groups was significant.

The findings of the statistical treatment of data will be found in Chapter IV.

CHAPTER IV

PRESENTATION OF THE DATA

The data will be presented in two sections. The first section will be made up of number and percentage comparisons; the second section, of results of the statistical treatment of the data for each classification. A brief summary precedes the two groups of tables for each classification.

Tabular presentation of data

Age, grade and sex. The total number of students compared was 308 from broken homes and 100 from non-broken homes as shown in Table I.

The 308 students from broken homes represented 27 per cent of the total enrollment of Paris Gibson Junior High School. The 100 students from non-broken homes represented about nine per cent of the total school enrollment and twelve per cent of the students from non-broken homes.

Forty-five per cent of the students from broken homes were boys and 55 per cent were girls, as compared to 52 per cent boys and 48 per cent girls in the control group.

Of the broken-home student population 171 students, or 55 per cent, were in the seventh grade as compared to 137 eighth grade students for 45 per cent. One half of the control group was in each of the two grades.

Broken-home students have a higher chronological age. The median age for students from broken homes is 13 years as compared to 12 years for the students from non-broken homes. The difference in age may be explained by the large number of broken-home students that had repeated one or more grades as shown in Table VI, page 42.

TABLE I
DISTRIBUTION OF STUDENTS BY
SEX, GRADE AND AGE

	Broken Home		Non-broken Home	
	Number	Percent	Number	Percent
Total students	308		100	
Boys	140	45	52	52
Girls	168	55	48	48
Students in grade seven	171	55	50	50
Students in grade eight	137	45	50	50
Students fifteen years old	14	5		
Students fourteen years old	38	12	2	2
Students thirteen years old	135	44	22	22
Students twelve years old	110	36	71	71
Students eleven years old	8	3	5	5

The broken home. In Table II is represented the per cent of students by the types of broken homes as found in this study. The 27 per cent incidence of broken homes is comparable to that reported in other studies. Shaw and McKay, for instance, found 29 per cent¹ and the White House study 25 per cent incidence of broken homes.² However, it is more than the 18 per cent found in the Wallenstein study.³

In the broken-home group, 73 per cent of the homes are broken by divorce as compared to 24 per cent by death and only 3 per cent by separation.

Of the total number of students belonging to the broken-home group, 62 per cent lived with one real parent and a step-parent, 28 per cent remained with one parent, 8 per cent lived with relatives, and 1 per cent had been placed in foster homes.

¹Clifford Shaw and H. D. McKay, "Are Broken Homes a Causative Factor in Juvenile Delinquency?" Social Forces, 10:514-524, 1932.

²Spencer H. Crooks, "For the Children Who Must Live Away From Home," The Child, United States Children's Bureau, 6:82, February, 1952.

³Nehemiah Wallenstein, Character and Personality of Children From Broken Homes, (Bureau of Publications, Teacher's College, Columbia University, New York City, 1937), p. 37.

TABLE II
DISTRIBUTION OF STUDENTS
BY TYPE OF BROKEN HOME

PART A

CAUSE OF BROKEN HOME

	Number	Per cent
Students from homes broken by divorce	224	73
Students from homes broken by death	74	24
Students from homes broken by separation	10	3

PART B

STATUS OF HOME

	Number	Per cent
Students from homes with only one parent	86	28
Students from homes with a step-parent	192	62
Students living with relatives	26	8
Students living in foster homes	4	1

With whom the broken-home student lives

Boys. Of the 140 boys, as shown in Table III, Part A, 71 lived with their mother and stepfather. Eighty-one per cent of the boys living with mother and stepfather were from homes broken by divorce. The other 18 per cent came from homes broken by the death of the father. Thirty per cent of the boys lived with mother only. Of these, 42 cases or 50 per cent, came from homes broken by divorce. The remaining cases where the boys lived with the father, relations or in foster homes, the number in each classification was small but the majority of the cases came from homes broken by divorce. Seventy per cent of the broken-home boys came from homes broken by divorce as compared to 20 per cent broken by the death of the father, 4 per cent by the death of the mother and 6 per cent by separation.

Girls. Part B of Table III indicates that, like the boys, the larger proportion of the cases came from homes broken by divorce. Of the 168 broken-home girls, 71 per cent came from homes broken by divorce. In 92 per cent of the cases where girls lived with mother and stepfather, the home was broken by divorce. Twenty-three per cent of the girls from broken homes lived with their mother. Forty-nine per cent of these cases were from homes broken by divorce and 46 per cent were broken by death of the father. Eleven per cent of the girls lived with father and stepmother. Of

these, 61 per cent came from homes broken by divorce and the other 39 per cent from homes broken by the death of the mother.

Boys and girls combined. Table III, Part C, shows that the majority of the students from broken homes stayed with the mother. Fifty-three per cent of the students lived with mother and stepfather and 26 per cent with mother only. When both groups are combined, 79 per cent of the students stayed with the mother. Nine per cent lived with the father and stepmother and 2 per cent with father only. In only 11 per cent of the cases did the student live with the father after the home had been broken. Seventy-four per cent of the broken-home students came from homes broken by divorce.

TABLE III

TYPE OF BROKEN HOME ACCORDING TO ADULTS
WITH WHOM THE STUDENT LIVES

PART A

BOYS

	N	Divorced	Father Dead	Mother Dead	Separated	Total
Mother and Stepfather	71	81%	18%			51%
Mother	42	50	31		19%	30
Father and Stepmother	11	82		18%		8
Father	4	50		50		3
Relatives	10	70	10	20		7
Foster Parents	2	50	50			1
Total	140	70	20	4	6	

PART B

GIRLS

	N	Divorced	Father Dead	Mother Dead	Separated	Total
Mother and Stepfather	92	92%	8%			55%
Mother	39	49	46		5%	23
Father and Stepmother	18	61		39%		11
Father	1			100		1
Relatives	16	56	13	31		10
Foster Parents	2	100				1
Total	168	75	16	8	1	

PART C
BOYS AND GIRLS COMBINED

	N	Divorced	Father Dead	Mother Dead	Separated	Total
Mother and Stepfather	163	88%	12%			53%
Mother	81	49	38		12%	26
Father and Stepmother	29	69		31%		9
Father	5	40		60		2
Relatives	26	62	12	27		8
Foster Parents	4	75	25			1
Total	308	74	18	6	3	

Occupational classification and type of broken home

Table IV, Parts A, B, and C show how the home was broken, and the occupation of the father at the time the home was broken.

Part A of Table IV shows that 6 per cent of the boys from broken homes came from the professional and managerial occupational field, while Part B of table IV shows that 9 per cent of the broken-home girls came from the same occupational classification. In the professional and managerial occupational field, 44 per cent of the boys' homes were broken by death and 55 per cent by divorce. However, for the girls, only 20 per cent of the homes in this classification were broken by death and 80 per cent by divorce. The situation was just reversed in the clerical and sales occupational field, where 67 per cent of the boys in this classification came from homes broken by divorce and 34 per cent by the death of a parent. Fifty-three per cent of the girls from homes in the clerical and sales occupational classification, as presented in part B of Table IV, came from homes broken by death of a parent; 42 per cent from homes broken by divorce; and 4 per cent from homes broken by separation. The only instance where the home was broken by divorce in less than 50 per cent of the total number of cases in any one classification was for girls from homes in the clerical and sales occupational field.

Part C of Table IV indicates that within all occupational classifications the majority of broken-home students came from homes broken by divorce.

TABLE IV
TYPE OF BROKEN HOME ACCORDING TO
OCCUPATIONAL CLASSIFICATION

PART A

BOYS

Occupational Classification	N	Divorced	Father Dead	Mother Dead	Separated	Total
Professional and Managerial	9	55%	22%	22%		6%
Clerical and Sales	21	67	29	5		15
Service	25	64	32			18
Agriculture	4	100				3
Skilled	10	60	10	20	10	7
Semiskilled	20	75	10		15	14
Unskilled	51	70	20	2	6	37
Total	140	70	20	4	6	

PART B

GIRLS

Occupational Classification	N	Divorced	Father Dead	Mother Dead	Separated	Total
Professional and Managerial	15	80%	20%			9%
Clerical and Sales	24	42	37	16	4	14
Service	33	85	12	3		20
Agriculture	9	78		22		5
Skilled	20	60	20	20		12
Semiskilled	24	83	13	4		14
Unskilled	43	86	9	2	2	26
Total	168	75	16	8	1	

PART C

BOYS AND GIRLS COMBINED

Occupational Classification	N	Divorced	Father Dead	Mother Dead	Separated	Total
Professional and Managerial	24	71%	21%	8%		8%
Clerical and Sales	45	53	33	11	2	15
Service	58	76	21	2	2	19
Agriculture	13	85		15		4
Skilled	30	60	17	20	3	10
Semiskilled	44	80	11	2	7	14
Unskilled	94	80	14	3	4	31
Total	308	74	18	6	3	

Attendance

The average number of days of absence for boys from broken homes was 11.6 as compared to 6 days of absence for boys from non-broken homes. The girls from broken homes were absent from school an average of 12.6 days, and the girls from non-broken homes were absent an average of 7.7 days during the year. The average number of days of absence from school for the broken-home students was 12, as compared to an average of 6.8 days of absence for students from the control group.

The boys from broken homes averaged one tardiness during the year as compared to 6.6 for the boys from non-broken homes. Broken-home girls were tardy an average of .8 times, while girls from non-broken homes averaged .2 times tardy for the year. The students from broken homes averaged .9 tardiness, and the students of the control group averaged .5 tardiness for the school year.

TABLE V

AVERAGE NUMBER OF DAYS ABSENT AND AVERAGE
TIMES TARDY FOR STUDENTS FROM BROKEN
AND NON-BROKEN HOMES

	Average days Absent	Average times Tardy
Broken Home Boys	11.6	1.0 ✓
Non-broken-home Boys	6.0	.6
Broken Home Girls	12.6	.8 ✓
Non-broken-home Girls	7.7	.2
Total Broken Home	12.0	.9
Total Non-broken-home	6.8	.3

Students repeating one or more grades

Probably one of the most revealing areas of success in school, at least to the student, is promotion from one grade to the next. Table VI indicates that students from broken homes are far less successful in being promoted than are those students from non-broken homes. Forty-nine per cent of the boys from broken homes had repeated one grade and 14 per cent had repeated two grades, as compared to 8 per cent of the boys from non-broken homes repeating one grade and none repeating more than one grade. Twenty-four per cent of girls from broken homes had repeated one grade, and 4 per cent had repeated two grades. In contrast, only 6 per cent of the non-broken-home girls had repeated one grade and none had repeated more than one grade. A total of 36 per cent of the broken-home students had repeated one grade and 8 per cent had repeated two grades. Seven per cent of the control group had repeated one grade only.

TABLE VI
NUMBER AND PERCENTAGE OF STUDENTS
REPEATING ONE OR MORE GRADES

	Broken Home		Non-broken Home	
	Number	Percent	Number	Percent
Boys repeating one or more grades	69	49	4	8
Boys repeating more than one grade	19	14		
Girls repeating one or more grades	41	24	3	6
Girls repeating more than one grade	7	4		
Boys and girls repeating one or more grades	110	36	7	7
Boys and girls repeating more than one grade	26	8		

Study habits, citizenship and attitudes

Boys. Part A of Table VI shows that the boys from broken homes were rated much lower, proportionately, in study habits, citizenship and attitudes, than those from non-broken homes. In all but citizenship, the larger percentage of boys from broken homes were rated "poor". The larger percentage percentage of boys from the control group were rated "good".

Girls. Part B of Table VI shows that over half of the girls from broken homes were rated "fair" or "poor" in study habits, while only 15 per cent of the girls from non-broken homes were so rated. Over 85 per cent of the girls from non-broken homes were rated either "excellent" or "good" in citizenship and attitudes, while 67 per cent of the broken-home girls were given the same rating.

A comparison of boys and girls indicates that the school adjustment of girls from broken homes was probably a little better than boys from broken homes. The difference in percentage between boys of broken and non-broken homes rated "poor" for study habits is 40 per cent. For girls, the difference is 21 per cent in the same classification. For citizenship, in the percentage of boys rated "poor", there is a difference of 21 per cent between the broken and non-broken-home groups. The difference is 11 per cent for the girls. There is a difference of 30 per cent between

boys of broken and non-broken homes in attitude, and a 10 per cent difference between the broken-home and non-broken-home girls in the same classification.

Discipline. The students from broken homes and the control group were rated by the home room teachers and checked by the principal and attendance officer in regard to disciplinary problems. Boys from broken homes were indicated to be discipline problems of varying degree in 50 per cent of the cases, while 5 per cent of the non-broken-home boys were so indicated. Twenty-four per cent of the broken-home girls were rated as discipline problems as compared to 4 per cent for the non-broken-home girls.

When the home breaks, the children lose touch with one or both parents and a certain amount of adjustment must take place. Routines and habits must change, causing irritabilities and frustrations common only to each individual. These children inevitably feel at a disadvantage.⁴

⁴Edwin A. Cowan, "Some Emotional Problems Besetting The Lives of Foster Children," Mental Hygiene, 22:454-58, September, 1938.

TABLE VII

COMPARISON OF STUDY HABITS, CITIZENSHIP AND ATTITUDES
OF STUDENTS FROM BROKEN AND NON-BROKEN HOMES

PART A

BOYS

	Number	Excellent	Good	Fair	Poor
Study habits					
BH	140	7%	19%	24%	50%
NBH	52	17	52	21	10
Citizenship					
BH	140	12	29	34	25
NBH	52	42	44	11	2
Attitude					
BH	140	12	29	25	34
NBH	52	39	40	17	4

PART B

GIRLS

	Number	Excellent	Good	Fair	Poor
Study habits					
BH	164	15%	31%	30%	23%
NBH	48	40	46	13	2
Citizenship					
BH	164	30	37	20	13
NBH	48	63	25	10	2
Attitude					
BH	164	30	37	21	12
NBH	48	60	27	10	2

BH indicates Broken Home.
NBH indicates Non-broken Home.

Statistical presentation of data

The "case study" method used in many recent studies has a tendency to contain more of the preconceived than the empirical.⁵ The present study attempts to be as objective as possible.

The procedure for presenting the findings of the statistical treatment of the data for intelligence, grade point average, and grade equivalent, will consist of a brief summary preceding two groups of tables for each classification. In the first group of tables are the tabulations of the number of cases, the mean, the standard deviation from the mean and the standard error of the mean (SEM). The second group of tables for each classification consists of tables depicting the significance of the observed difference between means of the two compared groups within each of the classified areas.

The "t"-test of significance was used to determine if an observed difference between two compared means was significant.

A difference, significant at the five per cent level of confidence indicates that in ninety-five items out of one hundred, the difference was due to something other than

⁵Nehemia Wallenstein, Character and Personality of Children From Broken Homes (Bureau of Publications, Teachers College, Columbia University, New York City, 1937), p. 21.

chance alone. A difference, significant at the one per cent level of confidence, indicates that ninety-nine times out of one hundred, the difference was due to something other than chance alone. A difference, significant at the one tenth of one per cent level of confidence, indicates that nine hundred and ninety-nine times out of one thousand, the difference was due to something other than chance alone.

In order to determine levels of confidence between the means of two small uncorrelated samples, the following procedure was used:

The "F"-test was applied to the variances testing for homogeneity.

$$F = \frac{S_1^2}{S_2^2}$$

where S_1^2 = the variance for one group;

S_2^2 = the variance for the second group.⁶

When the "F"-test indicated homogeneity on the .05 level or better, the variance was pooled and "t" calculated:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left(\frac{\sum X_1^2 + \sum X_2^2}{N_1 + N_2 - 2} \right) \left(\frac{N_1 + N_2}{N_1 N_2} \right)}}$$

Where \bar{X}_1 and \bar{X}_2 are the sample means;

N_1 and N_2 the number of cases in each sample;

⁶Francis G. Cornell, The Essentials of Educational Statistics. (New York: John Wiley & Sons, Inc.,) 1956
p. 232.

X_1^2 and X_2^2 the variances of the individual scores from the means of the respective samples.⁷

When the "F"-test indicated a lack of homogeneity the Cockran and Cox correction formula was used:

$$t_x = \frac{(S\bar{X}_1^2) (t_1) + (S\bar{X}_2^2) (t_2)}{Sx_1^2 + Sx_2^2}$$

Where Sx_1^2 and Sx_2^2 the variances of the means;

t_1 degree of freedom for one group;

t_2 degree of freedom for the second group.⁸

In order to determine levels of confidence between the means of large grouped data, the "Critical Ratio" was used:

$$C.R. = \frac{\bar{X}_1 - \bar{X}_2}{S\bar{X}_1 - \bar{X}_2}$$

Where \bar{X}_1 and \bar{X}_2 are the sample means;

$S\bar{X}_1 - \bar{X}_2$ the standard error of the difference between the means.⁹

⁷Ibid., p. 231

⁸Ibid., p. 237

G. Milton Smith, A Simplified Guide to Statistics for Psychology and Education, (New York: Rinehart and Company, 1947), p. 57.

Intelligence

This classification was subdivided into students from broken homes, boys and girls; students from non-broken homes, boys and girls; and students from broken and non-broken homes.

The number of cases, the mean, the standard deviation from the mean, and the standard error of the mean for each of the classifications will be found in Table VIII.

Table IX shows the number of cases, the difference of means, critical ratio and the significance level for each of the compared classifications.

The means of the intelligence quotients of students of the various broken-home groups are consistently lower than the means of students from the non-broken-home groups. For the boys, the mean of the broken home cases is nearly 12 points below that of the non-broken-home cases, showing differences significant at the one tenth of one percent level of confidence. For the girls, the mean of the broken-home cases is just under 12 points below that of the non-broken home cases, the difference being significant at the one tenth of one per cent level of confidence. The mean difference between the students from the broken and non-broken homes is 12 points higher in favor of students from non-broken homes. The difference is significant at the one tenth of one per cent level of confidence. In addition, the

upper limits of the ranges in intelligence quotients are found to be only 6 points higher for the non-broken-home group, but the lower limits of the ranges are found to be 27 points lower for the broken-home group than for the non-broken-home group.

TABLE VIII

THE NUMBER OF CASES, THE RANGE, THE MEAN, THE STANDARD DEVIATION FROM THE MEAN AND THE STANDARD ERROR OF THE MEAN FOR THE I.Q. OF STUDENTS FROM BROKEN AND NON-BROKEN HOMES

	Number of Cases	Range	Mean	Standard Deviation	SEM
Broken Home Boys	140	60-131	98.40	14.69	1.241
Non-broken Home Boys	52	93-137	110.30	9.29	1.288
Broken Home Girls	165	69-134	102.67	11.37	.884
Non-broken home Girls	48	96-140	114.60	9.95	1.435
Broken Home Boys and Girls	305	60-134	100.46	12.99	.744
Non-broken Home Boys and Girls	100	93-140	112.51	9.87	.987

TABLE IX

SIGNIFICANT DIFFERENCES OF I.Q. OF STUDENTS
FROM BROKEN AND NON-BROKEN HOMES

		Number of Cases	Difference of Means	Critical Ratio	Significance Level	Higher Group
B	S & Br and Nr	140 52	11.90	6.685	***	NBH
G	S & Br and Nr	165 48	11.93	7.012	***	NBH
S & Br and Nr		305 100	12.05	9.711	***	NBH

B -- Boys S -- Homes broken by divorce and separation.
 G -- Girls Br -- Homes broken by death.
 Nr -- Non-broken homes.
 *** -- Indicates significance at the .001 level of confidence.

Grade point averages

Grade point averages of students from broken and non-broken homes. This classification is subdivided into students from homes broken, boys and girls; students from non-broken homes, boys and girls; and all students from broken and non-broken homes.

The number of cases, the mean, the standard deviation from the mean and the standard error from the mean for each of the classifications will be found in Table X. The above listed information is shown in Table XI, Part A and Part B for homes broken by divorce and separation, and death.

Table XII indicates the number of cases, the difference of means, critical ratio, and the significance level for each of the compared classifications.

The means of the grade point averages of the broken-home groups are consistently lower than the means of the non-broken home groups. The means of grade point averages do not differ greatly for boys or girls in the divorce and separation, and death classifications except that the mean of the boys from homes broken by divorce and separation is considerably lower than any of the other groups.

The difference between means of boys from homes broken by divorce and separation and non-broken homes is significant at the one-tenth of one per cent level of confidence. The difference of the means for girls from homes

broken by divorce and separation and non-broken homes is significant at the one per cent level of confidence. Where the students were combined, the difference of means between homes broken by divorce and separation and non-broken homes is significant at the one-tenth of one per cent level of confidence. The difference of means between homes broken by death and non-broken homes is significant at the five per cent level of confidence.

These significant differences indicate that regardless of how the home was broken, the grade point averages tend to be lower than the grade point averages of the control group. The girls from homes broken by death are the only group from the broken-home classification that have a "C" average.

TABLE X

THE NUMBER OF CASES, THE MEAN, THE STANDARD DEVIATION
FROM THE MEAN AND THE STANDARD ERROR OF THE MEAN
FOR GRADE POINT AVERAGES OF STUDENTS FROM
BROKEN HOMES AND NON-BROKEN HOMES

	Number of Cases	Mean	Standard Deviation	SEM
Broken Home Boys	138	1.548	.863	.074
Non-broken Home Boys	52	2.504	.668	.094
Broken Home Girls	166	1.945	.896	.070
Non-broken Home Girls	48	2.927	.708	.103
Broken Home Boys and Girls	304	1.763	.911	.053
Non-broken Home Boys and Girls	100	2.725	.750	.074

TABLE XI

THE NUMBER OF CASES, THE MEAN, THE STANDARD DEVIATION
FROM THE MEAN AND THE STANDARD ERROR OF THE MEAN
OF GRADE POINT AVERAGES ACCORDING
TO TYPE OF BROKEN HOME

PART A

DIVORCE AND SEPARATION

	Number of Cases	Mean	Standard Deviation	SEM
Boys	104	1.44.	.825	.081
Girls	128	1.906	.865	.077
Boys and Girls	232	1.725	.880	.058

PART B

DEATH

	Number of Cases	Mean	Standard Deviation	SEM
Boys	34	1.806	.903	.155
Girls	38	2.018	.847	.137
Boys and Girls	72	1.918	.917	.109

TABLE XII

SIGNIFICANT DIFFERENCES OF GRADE POINT AVERAGES OF STUDENTS FROM BROKEN AND NON-BROKEN HOMES

	Number of Cases	Difference of Means	Critical Ratio	Significance Level	Higher Group
B S and B Nr	104 52	1.063	8.572	***	Nr
G S and G Nr	128 48	1.023	2.898	**	Nr
B & G S and B & G Nr	232 100	1.000	10.416	***	Nr
B & G Br and B & G Nr	72 100	.807	2.279	*	Nr
B S & Br and B Nr	138 52	.956	7.966	***	Nr
G S & Br and G Nr	166 48	.933	2.802	**	Nr
S & Br and Nr	304 100	.962	10.344	***	Nr

B -- Boys S -- Homes broken by divorce and separation
 G -- Girls Br -- Homes broken by death
 Nr -- Non-broken homes

* Indicates significant at the .05 level.

** Indicates significance at the .01 level

*** Indicates significance at the .001 level.

Grade point averages according to adults with whom the students live. This classification is subdivided into students living with mother and stepfather, mother, father and stepmother, and relatives according to sex.

The number of cases, the mean, the standard deviation from the mean and the standard error of the mean for each of the classifications will be found in Table XIII.

Table XIV indicates the significant differences between means of students living with: mother and stepfather as compared with living with mother only; mother and stepfather as compared with father and stepmother; mother and stepfather as against relatives; mother as against father and stepmother; mother as against relatives; father and stepmother as against relatives.

The mean grade point average of students living with only the mother is higher than from any of the other groups. However, the differences between the means of the groups compared with students living with the mother are not significant. The difference of means for all groups compared is small. The largest difference is between students living with mother and stepfather, and mother, and this difference is only twenty-one hundredths of a grade point. There are no significant differences between means with regard to the adults with whom the students live.

TABLE XIII

THE NUMBER OF CASES, THE MEAN, THE STANDARD DEVIATION
FROM THE MEAN AND THE STANDARD ERROR OF THE MEAN
FOR GRADE POINT AVERAGES ACCORDING TO ADULTS
WITH WHOM THE STUDENTS LIVE

	Number of Cases	Mean	Standard Deviation	SEM
Mother and Stepfather				
Boys	71	1.407	.780	.093
Girls	91	1.880	.852	.090
Boys and Girls	163	1.673	.790	.063
Mother				
Boys	40	1.563	.817	.131
Girls	39	2.213	.842	.137
Boys and Girls	79	1.884	.824	.094
Father and Stepmother				
Boys	11	1.327	.918	.290
Girls	17	1.988	.794	.199
Boys and Girls	28	1.729	.892	.172
Relatives				
Boys	12	1.700	.958	.290
Girls	18	1.739	.764	.185
Boys and Girls	30	1.723	.830	.154

TABLE XIV

SIGNIFICANT DIFFERENCES OF GRADE POINT AVERAGES
ACCORDING TO ADULTS WITH WHOM STUDENTS LIVE

	Difference of Means	"t" Score	Significance Level	Degrees of Freedom	Higher Group
M & Sf and M	.211	1.851		239	M
M & Sf and F & Sm	.056	.292		188	F & Sm
M & Sf and R	.050	.384		190	R
M and F & Sm	.155	.820		105	M
M and R	.161	.909		107	M
F & Sm and R	.006	.027		56	F & Sm

M -- Mother F -- Father Sf -- Stepfather
Sm -- Stepmother R -- Relatives

Grade point averages regarding the period of time since the home was broken. This classification was subdivided into students from homes broken less than one year, one to three years, four to six years, seven to ~~nine~~ years, and ten years and over by sex and combined.

The number of cases, the mean, the standard deviation from the mean, and the standard error of the mean for each of the classifications will be found in Table XV.

Table XVI indicates the significant differences between means of grade point averages for students from homes broken one to three years, and four to six years; one to three years, and seven to nine years; one to three years, and ten years and over; four to six years, and seven to nine years; four to six years, and ten years and over; seven to nine years, and ten years and over.

The means of the grade point averages tend to be lower at the upper and lower limits of the periods of time the home was broken. There are significant differences of means between all groups that were compared to the group of students from homes broken ten years and over. Differences between means of grade point averages from homes broken one to three years, and ten years and over is significant at the one per cent level of confidence. The remaining comparisons made to homes broken ten years and over are significant at the five per cent level of confidence.

There are no other significant differences of the groups compared in this classification.

TABLE XV

THE NUMBER OF CASES, THE MEAN, THE STANDARD DEVIATION
FROM THE MEAN AND THE STANDARD ERROR OF THE MEAN
FOR GRADE POINT AVERAGES IN REGARD TO THE
NUMBER OF YEARS THE HOME WAS BROKEN

	Number of cases	Mean	Standard Deviation	SEM
Less than 1 year				
Boys and Girls	8	1.600	.663	.234
1-3 years				
Boys	22	1.423	.731	.162
Girls	27	2.404	.822	.161
Boys and Girls	49	1.963	.775	.112
4-6 years				
Boys	33	1.706	.857	.151
Girls	33	1.967	.740	.131
Boys and Girls	66	1.836	.784	.097
7-9 years				
Boys	37	1.514	.927	.155
Girls	60	1.977	.885	.115
Boys and Girls	97	1.800	.896	.092
10 years and over				
Boys	43	1.409	.949	.146
Girls	42	1.619	.854	.133
Boys and Girls	85	1.513	.898	.098

TABLE XVI

SIGNIFICANT DIFFERENCES OF GRADE POINT AVERAGES
ACCORDING TO THE NUMBER OF YEARS THE HOME
WAS BROKEN

	Difference of Means	"t" Score	Significance Level	Degrees of Freedom	Higher Group
1-3 years and 4-6 years	.127	.858		113	1-3
1-3 years and 7-9 years	.163	1.094		144	1-3
1-3 years and 10 & over	.450	2.922	**	132	1-3
4-6 years and 7-9 years	.036	.265		161	4-6
4-6 years and 10 & over	.323	2.308	*	149	4-6
7-9 years and 10 & over	.287	2.141	*	180	7-9

* -- Indicates significance at the .05 level.

** -- Indicates significance at the .01 level.

Occupational classification. This classification is subdivided into occupation of the father as: professional and managerial, clerical and sales, service, skilled labor, semiskilled labor, and unskilled labor.

The number of cases, the mean, the standard deviation from the mean and the standard error of the mean for each of the classifications of broken and non-broken homes by sex will be found in Table XVII, Parts A, B, C, D, E, and F.

Table XVIII, Parts A, B, and C indicate the significant differences between means of grade point averages of students from broken and non-broken homes in each of the occupational classifications.

The students from broken and non-broken homes in the professional and managerial classification all maintained a mean grade point average of better than "C." However, the difference between means is large and in favor of the non-broken-home group. The difference of means for girls is significant at the one per cent level of confidence. Significance is indicated on the five per cent level of confidence between broken and non-broken homes. There is no significance indicated in the difference of means between boys of broken and non-broken homes.

The difference of means between boys of broken and non-broken homes for the clerical and sales classification is larger than is the difference shown between girls. The

difference of means for boys is significant at the one per cent level of confidence. The difference is not significant for the girls. The difference of means of grade point averages for students in the clerical and sales classification is significant at the one per cent level of confidence.

In the skilled labor classification, the difference of means between girls from broken and non-broken homes is larger than is the differences shown between boys. The difference in grade point averages for girls of broken and non-broken homes is significant on the one per cent level of confidence, and the difference for boys is not significant. The difference is significant between broken and non-broken homes at the one per cent level of confidence.

Comparison of the different groups shows that the grade point averages are highest for the professional and managerial classification and lowest for the unskilled labor classification. The differences of means of the grade point averages are significantly different between the broken and non-broken homes for all classifications.

TABLE XVII

THE NUMBER OF CASES, THE MEAN, THE STANDARD DEVIATION
FROM THE MEAN AND THE STANDARD ERROR OF THE MEAN
FOR THE GRADE POINT AVERAGE IN EACH
OCCUPATIONAL CLASSIFICATION

PART A

PROFESSIONAL AND MANAGERIAL

	Number of Cases	Mean	Standard Deviation	SEM
Broken Home Boys	10	2.350	.486	.162
Non-broken Home Boys	14	2.821	.634	.176
Broken Home Girls	15	2.593	.547	.146
Non-broken Home Girls	8	3.463	.676	.255
Broken Home Boys and Girls	25	2.496	.701	.143
Non-broken Home Boys and Girls	22	3.055	.708	.153

PART B
CLERICAL AND SALES

	Number of Cases	Mean	Standard Deviation	SEM
Broken Home Boys	21	1.843	.849	.189
Non-broken Home Boys	15	2.587	.645	.172
Broken Home Girls	23	2.356	.936	.199
Non-broken Home Girls	14	2.836	.560	.155
Broken Home Boys and Girls	44	2.111	.908	.139
Non-broken Home Boys and Girls	29	2.707	.609	.115

PART C
SERVICE

	Number of Cases	Mean	Standard Deviation	SEM
Broken Home Boys	25	1.768	.842	.168
Broken Home Girls	32	1.909	1.158	.205
Broken Home Boys and Girls	57	1.847	.914	.121

PART D

SKILLED

	Number of Cases	Mean	Standard Deviation	SEM
Broken Home Boys	10	1.730	.661	.220
Non-broken Home Boys	10	2.060	.663	.221
Broken Home Girls	20	2.020	.612	.140
Non-broken Home Girls	16	3.020	.612	.158
Broken Home Boys and Girls	30	1.923	.786	.146
Non-broken Home Boys and Girls	26	2.642	.777	.155

PART E

SEMISKILLED

	Number of Cases	Mean	Standard Deviation	SEM
Broken Home Boys	18	1.456	.740	.179
Broken Home Girls	24	1.975	.707	.147
Broken Home Boys and Girls	42	1.752	.554	.086

PART F
UNSKILLED

	Number of Cases	Mean	Standard Deviation	SEM
Broken Home Boys	50	1.098	.720	.103
Broken Home Girls	43	1.533	.728	.112
Broken Home Boys and Girls	93	1.350	.763	.080

TABLE XVIII

SIGNIFICANT DIFFERENCES OF GRADE POINT AVERAGES OF STUDENTS FROM BROKEN AND NON-BROKEN HOMES IN EACH OCCUPATIONAL CLASSIFICATION

PART A

PROFESSIONAL AND MANAGERIAL

		Difference of Means	"t" Score	Significance Level	Degrees of Freedom	Higher Group
B	S & Br and Nr	.471	1.432		22	NBH
G	S & Br and Nr	.870	3.346	**	21	NBH
S & Br Nr		.559	2.519	*	45	NBH

B -- Boys S -- Homes broken by divorce and separation.
 G -- Girls Br -- Homes broken by death.
 Nr -- Non-broken homes.
 * -- Indicates significance at the .05 level.
 ** -- Indicates significance at the .01 level.

PART B
CLERICAL AND SALES

	Difference of Means	"t" Score	Significance Level	Degrees of Freedom	Higher Group
B S & Br and B Nr	.744	2.851	**	34	NBH
G S & Br and G Nr	.480	1.777		35	NBH
S & Br and Nr	.596	2.983	**	71	NBH

PART C
SKILLED

	Difference of Means	"t" Score	Significance Level	Degrees of Freedom	Higher Group
B S & Br and B Nr	.330	1.112		18	NBH
G S & Br and G Nr	.990	3.944	**	34	NBH
S & Br and Nr	.719	3.123	**	54	NBH

B -- Boys S -- Homes broken by divorce and separation.
 G -- Girls Br -- Homes broken by death.
 Nr -- Non-broken homes.
 ** -- Indicates significance at the .01 level.

Grade equivalent

Grade equivalent at grade 6.5. This classification is subdivided into students from homes broken by divorce and separation, death, homes broken, and non-broken, boys and girls.

The number of cases, the mean, the standard deviation from the mean and the standard error of the mean for each of the classifications will be found in Table XIX, Part A and Table XX, Part A.

Table XXI, Parts A and B, indicate the significant differences between the means of grade equivalent for students from broken and non-broken homes.

The difference of means for the groups within the broken-home classification is not significant. There is practically no difference of means for homes broken by divorce and separation, and death. However, all comparisons of means between broken and non-broken homes are significant. There is a difference of at least one year of grade achievement of the means for all of the groups compared between broken and non-broken homes.

The significant difference of means of the grade equivalents would tend to indicate that there is no difference in achievement as to type of broken home, but that the real difference is whether or not the home is broken.

Grade equivalent at 8.5. This classification is

subdivided into students from homes broken by divorce and separation, death, homes broken, and non-broken, boys and girls.

The number of cases, the mean, the standard deviation from the mean, and the standard error of the mean for each of the classifications will be found in Table XIX, Part B and Table XX, Part B.

Table XXI, Parts C and D, indicate the significant differences between the means of grade equivalent for students from broken and non-broken homes.

The difference of means for the groups within the broken-home classifications is not significant. There is practically no difference of means for homes broken by divorce and separation, and death. There is no significant difference between boys from non-broken homes and boys in the group where the home was broken by death. The comparisons of means between all other groups of broken and non-broken homes are significant at the one per cent level of confidence. There is a difference of at least one year of grade achievement of the means for all combined groups.

The significant difference of means of the grade equivalents would tend to indicate that there is no difference in achievement as to how the home is broken, but that the real difference is whether or not the home was broken.

TABLE XIX

THE NUMBER OF CASES, THE MEAN, THE STANDARD DEVIATION
FROM THE MEAN AND THE STANDARD ERROR OF THE MEAN
ACCORDING TO GRADE EQUIVALENT OF STUDENTS
FROM BROKEN AND NON-BROKEN HOMES

PART A

GRADE EQUIVALENT AT 6.5

	Number of Cases	Mean	Standard Deviation	SEM
Broken Home Boys	73	6.00	1.454	.171
Non-broken Home Boys	28	7.44	1.292	.249
Broken Home Girls	65	6.28	1.253	.157
Non-broken Home Girls	24	7.95	1.200	.250
Broken Home Boys and Girls	138	6.13	1.310	.111
Non-broken Home Boys and Girls	52	7.59	1.020	.142

PART B

GRADE EQUIVALENT AT 8.5

	Number of Cases	Mean	Standard Deviation	SEM
Broken Home Boys	52	8.66	1.194	.167
Non-broken Home Boys	24	9.52	.996	.165
Broken Home Girls	87	8.60	1.132	.121
Non-broken Home Girls	24	9.77	1.039	.217
Broken Home Boys and Girls	139	8.62	1.213	.103
Non-broken Home Boys and Girls	48	9.66	.904	.130

TABLE XX

THE NUMBER OF CASES, THE MEAN, THE STANDARD DEVIATION
FROM THE MEAN AND THE STANDARD ERROR OF THE MEAN
ACCORDING TO GRADE EQUIVALENT OF STUDENTS
AND TYPE OF BROKEN HOME

PART A

GRADE EQUIVALENT AT 6.5

	Number of Cases	Mean	Standard Deviation	SEM
Divorce and Separation				
Boys	57	5.95	1.520	.203
Girls	55	6.25	1.319	.180
Boys and Girls	112	6.10	1.414	.134
Death				
Boys	16	6.19	1.456	.376
Girls	11	6.32	1.044	.330
Boys and Girls	27	6.24	1.257	.246

PART B

GRADE EQUIVALENT AT 8.5

	Number of Cases	Mean	Standard Deviation	SEM
Divorce and Separation				
Boys	36	8.64	1.200	.203
Girls	60	8.59	1.118	.146
Boys and Girls	96	8.61	1.136	.117
Death				
Boys	16	8.73	1.691	.436
Girls	26	8.49	1.010	.202
Boys and Girls	42	8.58	1.292	.202

TABLE XXI

SIGNIFICANT DIFFERENCES OF GRADE EQUIVALENTS OF STUDENTS FROM BROKEN AND NON-BROKEN HOMES

PART A

GRADE EQUIVALENT AT 6.5

	Difference of Means	"t" Score	Significance Level	Degrees of Freedom	Higher Group
B S and B Br	.24	.061		71	Br
G S and G Br	.07	.008		64	Br
B & G S and B & G Br	.14	.540		137	Br
B S and B Nr	1.49	4.442	**	83	Nr
B Br and B Nr	1.25	2.948	**	42	Nr
G S and G Nr	1.70	5.390	***	77	Nr
G Br and G Nr	1.75	3.986	**	33	Nr
B & G S and B & G Nr	1.49	6.535	***	160	Nr

PART A (continued)
GRADE EQUIVALENT AT 6.5

	Difference of Means	"t" Score	Significance Level	Degrees of Freedom	Higher Group
B & G Br and B & G Nr	1.35	4.545	***	77	Nr
S & Br and Nr	1.46	(C.R.) 6.001	***		Nr

B -- Boys Nr -- Non-broken home, Br -- Home broken by death,
G -- Girls S -- Home broken by divorce or separation
C.R. -- Critical Ratio
** -- Indicates significance at the .01 level.
*** -- Indicates significance at the .001 level.

PART B
 GRADE EQUIVALENT AT 8.5

	Difference of Means	"t" Score	Significance Level	Degrees of Freedom	Higher Group
B S and B Br	.09	.221		50	Br
G S and G Br	.10	.368		84	S
B & G S and B & G Br	.03	.137		136	S
B S and B Nr	.98	3.234	**	58	Nr
B Br and B Nr	.79	1.863		38	Nr
G S and G Nr	1.18	4.000	***	82	Nr
G Br and G Nr	1.28	4.429	**	48	Nr
B & G S and B & G Nr	1.05	5.585	***	142	Nr
B & G Br and B & G Nr	1.08	4.737	**	88	Nr

PART B (continued)
GRADE EQUIVALENT AT 8.5

	Difference of Means	"t" Score	Significance Level	Degrees of Freedom	Higher Group
S & Br and Nr	1.04	(C.R.) 6.625	***		Nr

B -- Boys Nr -- Non-broken home, Br -- Home broken by death,
G -- Girls S -- Home broken by divorce or separation
C.R. -- Critical Ratio
** -- Indicates significance at the .01 level.
*** -- Indicates significance at the .001 level.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary. The objectives of this study were to: (1) discover the incidence of the broken homes of students from the Paris Gibson Junior High School in Great Falls, Montana; (2) discover the differences of school adjustment and achievement of students from broken homes and non-broken homes; (3) present these findings, as revealed through this study.

The 1,127 students enrolled in the Paris Gibson Junior High School were examined in regard to status of their homes. Of these, 308 were from broken homes. Where comparisons were made, the students from broken homes were compared with a random sample of 100 students from the remaining student population. In an effort to determine whether any sex differences existed, separate comparisons were made for the boys and the girls.

The participants were classified by: type of broken home, adults with whom the students live, occupation of father, age, grade, grades repeated, attendance, school adjustment, intelligence quotient, grade point average, and grade equivalent.

A tabular analysis was made by number and percent for the data involving the status of the home, with whom

the student lives, grade, age, attendance, school adjustment and occupation of the father.

For intelligence, grade point average, and grade equivalent, each of the groups was compared with reference to the mean, standard deviation from the mean, and the standard error of the mean, and the significance of the differences was computed.

Conclusions. Of the 308 students from broken homes, 45 per cent were boys and 55 per cent were girls. The difference is not great, but tends to indicate that there may be more reluctance on the part of the parent or parents to place a girl in an institution for care than a boy.

The age of the students from broken homes is relatively higher than that of students from non-broken homes. This is explained to a great degree by the large number of broken home students that have repeated grades in school.

Divorce accounted for almost three-fourths (73 per cent) of the broken homes. From the information gathered in this study, it would appear that children are not much of a deterrent to divorce. Sixty-two per cent of the students from broken homes had a step-parent. Considering the fact that approximately 16 per cent of the students came from homes broken less than three years, the percent of step-parents suggests that children do not impair the chances of remarriage.

Four out of every five students from broken homes remained with the mother. Only one out of ten broken home students remained with their father, and the same ratio of students lived with neither of their real parents. Apparently the mother tends to be the dominant influence on these students from broken homes.

Although the largest percent of broken home students came from the unskilled labor classification, there did not seem to be any definite pattern of homes broken by death or divorce. In none of the occupational classifications was death the predominant cause of the broken home.

A broken home situation seems to be more of a disadvantage to boys than girls, since 49 per cent of the boys of broken homes had repeated grades in school, as compared to 24 per cent of the girls repeating grades. Also, the fact that 14 per cent of boys from broken homes repeated more than one grade seems to indicate that this portion of the school population is having scholastic difficulty.

As a group, the students from broken homes rated much lower than the control group of students from non-broken homes in the area of school adjustment. The conclusion should not be reached, however, that all students from broken homes are not able to make good school adjustment, but rather that the adjustment of these broken-home

students as a group is more difficult.

The mean I.Q. for the students of broken homes is definitely lower than that for the non-broken-home students, thus placing them more at a disadvantage so far as academic success is concerned.

Of all the comparisons made, in no instance were the grade point averages of students from broken homes higher than for those of the control group. There were no statistical significant differences of mean grade point averages within the broken home classification. The inference is that it does not make much difference how the home is broken, but rather that it has been broken at all.

Grade equivalents show that the differences of means for the students in the seventh grade were more in favor of the non-broken-home group than were the differences for the eighth grade. This can be partially explained by the number of grades repeated and the higher chronological age of students from broken homes. However, the difference of means was in favor of the non-broken-home group in all classifications. The differences were statistically significant on at least the one per cent level of confidence except for boys from homes broken by death.

The matching of the broken and non-broken-home groups on socio-economic status, sex, and type of broken home did not eliminate, although it reduced, the tendency of the

mean differences to be in favor of the control group.

In conclusion, although it is impossible definitely to decide whether the mere broken-ness or disintegration of the home, or hereditary disposition, or both, can be considered responsible for the persisting differences found between the broken-home and the non-broken-home students in disfavor of the former, the present findings on the basis of the devices used indicate that being subjected to a broken-home situation is associated with less success in scholastic achievement as far as the students in this study are concerned. Yet, possibly because of the compensatory factors in life, the differences in disfavor of the broken-home students are rather small for most of the comparisons, so that broken and non-broken-home students cannot be looked upon psychologically as two distinctly different groups in school. In fact, it seems more proper that the term "broken home" be viewed as primarily a sociological but not necessarily a psychological concept, since there is little evidence that the impairment of the home unit inevitably entails also a psychological break.¹

As an objective for further investigation, there remains the problem as to whether the lack of school success

¹Nehemiah Wallenstein, Character and Personality of Children From Broken Homes, (Bureau of Publications, Teacher's College, Columbia University, New York City, 1937), p. 83.

found for broken-home students as compared with non-broken home students, is the result of the disintegration of the home in itself or of some other factor. Such an investigation would involve much research, covering a large number of subjects, with a testing program to be repeated on the same subjects over a long period of time. This would provide an opportunity for comparing their records before and after the change at home took place.

BIBLIOGRAPHY

A. BOOKS

- Bossard, James, Parent and Child. Philadelphia: University of Pennsylvania Press, 1953.
- Campbell, William Giles, Form and Style in Thesis Writing. New York: Houghton Mifflin Company, 1954.
- Colcord, Joanna C., Broken Homes. New York: Russell Sage Foundation, 1919.
- Cornell, Francis G., The Essentials of Educational Statistics, New York: John Wiley and Sons, Inc, 1956.
- Despert, J. Louise, Children of Divorce. New York: Doubleday and Company Inc., 1953.
- Good, Carter V. and Douglas E. Scates, Methods of Research: Educational, Psychological, Sociological. New York Appeton-Century-Crofts, Inc., 1954.
- Healy, William, and Bronner, Augusta, New Light on Delinquency and its Treatment. New Haven: The Institute of Human Relations, Yale University Press, 1936.
- Hopkirk, Howard W., Institutions Serving Children. New York: Russell Sage Foundation, 1944.
- Mowrer, Ernest R., Family Disorganization. Chicago, Illinois: The University of Chicago Press, 1939.
- Reuter, E. B. and Runner, James R. The Family: Source Materials for the Study of the Family and Personality. New York: McGraw-Hill Book Company, Inc., 1931.
- Rochford, Elbrun, Mothers on Their Own. New York: Harper and Brothers, 1953.
- Smith, B. Milton, A Simplified Guide to Statistics for Psychology and Education. New York: Rinehart and Company, 1947.
- Thorman, George, Broken Homes. Washington D.C.: Public Affairs No. 135, Public Affairs Committee, Inc., 1947.
- Wallenstein, Nehemiah, Character and Personality of Children From Broken Homes. New York City: Bureau of Publications, Teacher's College, Columbia University, 1937.

B. PUBLICATIONS OF THE GOVERNMENT, LEARNED SOCIETIES, AND OTHER ORGANIZATIONS

United States Department of Labor. Dictionary of Occupational Titles, Vol. II. Washington: Government Printing Office, 1949.

C. PERIODICALS

Anderson, Harold H., "Adjustment in the Family Situation," Review of Educational Research, 10:400-420, April, 1940.

Bailey, Henry Turner, "The Significance of the Home," National Education Association Journal, 21:46, Feb. 1932.

Beach, Allen E., "Family Migration and Child Behavior," Sociology and Social Research, 21:503-523, July 1950.

Beals, Lester, "A Study of Certain Home Factors and Their Relationship to the Personal Adjustment of Children," School and Society, 72:55-57, July, 1952.

Brownell, S. M., "Delinquency: An Important Problem in Education," School Life, 36:52-54, January 1954.

Campbell, Marion Wendlen, "The Effect of the Broken Home Upon the Child in School," Journal of Educational Sociology, 5:272-281, January 1932.

Cowan, Edwin A. "Some Emotional Problems Besetting the Lives of Foster Children," Mental Hygiene, 22:454-458, September, 1938.

Crooks, Spencer H., "For the Child Who Must Live Away From His Own Home," The Child, 16-82, February 1952.

Crosby, Stanley, "A Study of Alameda County Delinquent Boys, With Special Emphasis Upon the Group Coming From Broken Homes," Journal of Juvenile Research, 13:220-230, July, 1929.

Curtis, Erta Agnes and Nemzek, Claud L., "The Relation of Certain Unsettled Home Conditions to Academic Success of High School Pupils," Journal of Social Psychology, 9:419-435, November, 1938.

Gustad, John W., "Factors Associated With Social Behavior and Adjustment; A Review of the Literature," Educational and Psychological Measurements, 12:3-19, Spring 1952.

Koshush, Ruth P., "Developmental Records of 500 Nursery School Children," Journal of Experimental Education, 16:135-148, December, 1947.

Mills, Helen, "What Happens to Children," Association of University Women, 44:73-75, January, 1951.

- Newburger, Maurice, "The School and the Maladjusted Child," The Child, 17:14-21, January 1948.

- Shaw, Clifford, and McKay, Howard D., "Are Broken Homes a Causative Factor in Juvenile Delinquency?," Social Forces, 10:514-524, 1932.

- Risen, Norman, "Relation of Lack of One or Both Parents to School Progress," Elementary School Journal, 39:528-531, October, 1939.

- Zada, Nona M., "Case Studies: Bad Start in Life," Understanding the Child, 2:58-61, April 1952.

Zakolski, F. C., "Studies in Delinquency: II. Predictions of Delinquency in Boys," Journal of Genetic Psychology, 74:119-123, March 1949.

D. UNPUBLISHED MATERIALS

Berge, Robert H., "A Study of Children From Broken Homes in the Elementary School." Unpublished Master's Thesis, Montana State University, Missoula, 1953.

E. NEWSPAPERS

The Great Falls Tribune, "Divorce, Desertion Leave Many Children in Need," March 7, 1957.

APPENDIX

APPENDIX A
QUESTIONNAIRE

Is your father living?..... yes no

Does your father live at home with you?..... yes no

If not, how long is it since he did live with you?_____

Do you have a stepfather?..... yes no

What is your father's occupation?_____

Give a brief description of just what he does._____

If you have a stepfather, what is his occupation?_____

Give a brief description of just what he does._____

Is your mother living?..... yes no

Does your mother live at home with you?..... yes no

If not, how long is it since she did live with you?_____

Do you have a stepmother?..... yes no

Does your mother work?..... yes no

If so, what is her occupation?_____

Does your stepmother work?..... yes no

If so, what is her occupation?_____

Has your mother been divorced?..... yes no

Do you live with your parents?..... yes no

If not, with whom do you live?_____

APPENDIX B

INFORMATION CARD

NAME _____ AGE _____ GROUP _____

Home Status

Father dead _____
Mother dead _____
Separated _____
Divorced _____
Stepfather _____
Stepmother _____
Lives with _____

School Record

IQ _____ GE _____
Attendance Ab _____ T _____
Grade Point Average _____
Grades Repeated _____
Study Habits _____

Occupations

Father _____
Mother _____
Stepfather _____
Stepmother _____

Citizenship _____
Attitude _____
Discipline _____

Remarks _____

APPENDIX C

ORIGINAL HOME DATA FOR STUDENTS
FROM BROKEN HOMES

Number of Case	Sex	Type of Broken Home	Years Broken	Lives With	Occupation of Father
1	F	Divorce	4	Mother	4-5*
2	F	Death (F)	3	Mother	6-7
3	F	Death (M)	2	Father	4-5
4	F	Divorce	8	Mother	8-9
5	F	Separated	6	Mother	6-7
6	F	Death (F)	8	Mother	2
7	F	Death (M)	4	Sister	3
8	F	Death (F)	1	Mother	2
9	F	Death (F)	5	Mother	2
10	F	Divorce	7	Mother S-father	6-7
11	F	Divorce	6	Mother S-father	0
12	F	Divorce	11	Mother S-father	8-9
13	F	Death (F)	1	Mother	1
14	F	Divorce	3	Mother S-father	6-7
15	F	Death (M)	11	Father S-mother	8-9
16	F	Divorce	9	Mother S-father	2
17	F	Separated	1	Mother	1
18	F	Divorce	8	Mother S-father	8-9
19	F	Divorce	7	Mother S-father	6-7
20	F	Divorce	5	Mother S-father	6-7
21	F	Death (F)	4	Mother S-father	1
22	F	Divorce	9	Mother S-father	2
23	F	Divorce	9	Sister	8-9
24	F	Divorce	1	Mother	2
25	F	Divorce	6	Mother S-father	6-7
26	F	Divorce	7	Mother	2
27	F	Death (F)	3	Mother S-father	1
28	F	Divorce	7	Mother S-father	4-5
29	F	Divorce	5	Mother	8-9
30	F	Divorce	6	Mother S-father	6-7
31	F	Divorce	5	Grandmother	6-7
32	F	Death (F)	10	Mother	2
33	F	Divorce	10	Mother S-father	2

* 0 -- Professional and Managerial
 1 -- Clerical and Sales
 2 -- Service
 3 -- Agriculture

4-5 -- Skilled Labor
 6-7 -- Semiskilled Labor
 8-9 -- Unskilled Labor

Number of Case	Sex	Type of Broken Home	Years Broken	Lives With	Occupation of Father
34	F	Death (M)	6	Sister	4-5
35	F	Divorce	11	Mother S-father	1
36	F	Divorce	5	Father S-mother	2
37	F	Death (F)	12	Grandparents	8-9
38	F	Divorce	8	Grandparents	3
39	F	Death (F)	4	Mother	8-9
40	F	Divorce	14	Mother S-father	1
41	F	Divorce	8	Father S-mother	0
42	F	Divorce	10	Mother S-father	2
43	F	Divorce	8	Mother S-father	1
44	F	Divorce	11	Mother S-father	2
45	F	Death (M)	5	Father S-mother	4-5
46	F	Divorce	-1	Mother	4-5
47	F	Divorce	9	Father S-mother	6-7
48	F	Death (F)	7	Mother	1
49	F	Death (F)	10	Mother	0
50	F	Divorce	11	Mother S-father	6-7
51	F	Divorce	12	Mother S-father	0
52	F	Death (F)	7	Mother	0
53	F	Divorce	7	Mother S-father	2
54	F	Death (F)	10	Mother S-father	1
55	F	Divorce	11	Mother	2
56	F	Divorce	7	Mother S-father	0
57	F	Death (F)	8	Aunt and Uncle	1
58	F	Divorce	10	Father S-mother	8-9
59	F	Divorce	8	Mother S-father	8-9
60	F	Death (F)	6	Mother S-father	1
61	F	Divorce	8	Mother S-father	8-9
62	F	Divorce	6	Mother S-father	8-9
63	F	Divorce	10	Mother S-father	8-9
64	F	Divorce	3	Mother	4-5
65	F	Divorce	9	Mother S-father	6-7
66	F	Divorce	7	Mother S-father	2
67	F	Divorce	9	Mother S-father	8-9
68	F	Divorce	8	Mother	8-9
69	F	Divorce	9	Mother	8-9
70	F	Divorce	5	Foster Parents	8-9
71	F	Divorce	10	Mother S-father	8-9
72	F	Divorce	11	Mother S-father	2
73	F	Divorce	11	Aunt	2
74	F	Divorce	?	Adopted Parents	6-7
75	F	Divorce	10	Mother S-father	0
76	F	Death (F)	4	Mother S-father	4-5
77	F	Divorce	7	Mother S-father	0

Number of Cases	Sex	Type of Broken Home	Years Broken	Lives With	Occupation of Father
78	F	Death (M)	7	Father S-mother	1
79	F	Divorce	14	Mother S-father	2
80	F	Divorce	3	Mother	0
81	F	Death (M)	3	Father S-mother	4-5
82	F	Death (F)	1	Mother	2
83	F	Divorce	8	Aunt	3
84	F	Divorce	9	Mother S-father	8-9
85	F	Divorce	1	Mother	0
86	F	Divorce	1	Mother S-father	6-7
87	F	Divorce	8	Mother S-father	2
88	F	Death (F)	3	Mother	6-7
89	F	Death (M)	8	Father S-mother	1
90	F	Divorce	7	Mother S-father	0
91	F	Divorce	9	Mother S-father	8-9
92	F	Death (M)	3	Sister	3
93	F	Divorce	9	Mother S-father	6-7
94	F	Divorce	8	Mother S-father	2
95	F	Divorce	11	Mother S-father	8-9
96	F	Death (F)	10	Mother	4-5
97	F	Divorce	6	Mother S-father	8-9
98	F	Divorce	11	Mother S-father	8-9
99	F	Divorce	6	Mother S-father	3
100	F	Divorce	2	Mother S-father	8-9
101	F	Divorce	10	Mother S-father	8-9
102	F	Death (F)	7	Mother S-father	0
103	F	Divorce	3	Mother	1
104	F	Divorce	3	Aunt and Uncle	1
105	F	Divorce	7	Mother S-father	8-9
106	F	Divorce	5	Mother S-father	8-9
107	F	Divorce	5	Mother	8-9
108	F	Divorce	5	Father S-mother	0
109	F	Divorce	13	Grandmother	8-9
110	F	Divorce	7	Mother S-father	8-9
111	F	Death (M)	9	Grandparents	1
112	F	Divorce	8	Mother S-father	2
113	F	Death (F)	5	Mother	8-9
114	F	Divorce	2	Mother S-father	4-5
115	F	Divorce	7	Mother S-father	2
116	F	Divorce	7	Mother S-father	8-9
117	F	Divorce	8	Mother	8-9
118	F	Divorce	10	Aunt	8-9
119	F	Divorce	7	Mother S-father	8-9
120	F	Divorce	8	Mother S-father	8-9
121	F	Divorce	12	Mother S-father	4-5

Number of Case	Sex	Type of Broken Home	Years Broken	Lives With	Occupation of Father
122	F	Divorce	4	Mother S-father	6-7
123	F	Divorce	8	Mother S-father	8-9
124	F	Divorce	7	Mother S-father	8-9
125	F	Divorce	1	Father S-mother	0
126	F	Divorce	5	Mother S-father	4-5
127	F	Divorce	3	Mother S-father	3
128	F	Divorce	2	Mother S-father	2
129	F	Divorce	11	Mother	1
130	F	Divorce	10	Mother	8-9
131	F	Divorce	10	Mother S-father	6-7
132	F	Divorce	12	Mother S-father	8-9
133	F	Divorce	6	Mother S-father	3
134	F	Death (M)	7	Aunt	1
135	F	Divorce	10	Mother S-father	2
136	F	Divorce	3	Father S-mother	4-5
137	F	Divorce	10	Mother S-father	6-7
138	F	Divorce	12	Mother S-father	8-9
139	F	Death	?	Father S-mother	6-7
140	F	Divorce	3	Father S-mother	6-7
141	F	Separated	8	Mother	8-9
142	F	Divorce	7	Mother S-father	8-9
143	F	Divorce	9	Mother S-father	1
144	F	Divorce	8	Aunt	1
145	F	Divorce	11	Mother S-father	2
146	F	Divorce	10	Mother S-father	2
147	F	Divorce	8	Mother	1
148	F	Divorce	12	Mother	3
149	F	Divorce	5	Mother S-father	2
150	F	Divorce	7	Mother S-father	6-7
151	F	Divorce	9	Father S-mother	4-5
152	F	Divorce	10	Mother S-father	3
153	F	Death (F)	2	Mother	1
154	F	Separated	1	Mother	1
155	F	Divorce	9	Father S-mother	6-7
156	F	Divorce	5	Father S-mother	1
157	F	Divorce	8	Mother S-father	4-5
158	F	Divorce	4	Father S-mother	6-7
159	F	Death (F)	5	Mother S-father	4-5
160	F	Divorce	13	Mother S-father	2
161	F	Divorce	6	Mother S-father	4-5
162	F	Death (F)	2	Mother	4-5
163	F	Divorce	5	Mother S-father	1
164	F	Divorce	3	Mother S-father	4-5
165	F	Death (M)	7	Father S-mother	8-9

Number of Case	Sex	Type of Broken Home	Years Broken	Lives With	Occupation of Father
166	F	Divorce	1	Mother S-father	1
167	F	Divorce	11	Mother S-father	8-9
168	F	Divorce	7	Mother S-father	2
169	M	Divorce	10	Mother S-father	8-9
170	M	Separated	2	Mother	8-9
171	M	Divorced	7	Mother S-father	6-7
172	M	Death (M)	5	Grandmother	1
173	M	Death (M)	3	Mother	2
174	M	Divorce	9	Mother	4-5
175	M	Divorce	1	Mother	4-5
176	M	Divorce	6	Mother S-father	6-7
177	M	Divorce	4	Father S-mother	6-7
178	M	Divorce	13	Father S-mother	8-9
179	M	Death (F)	6	Mother S-father	2
180	M	Death (F)	10	Mother S-father	1
181	M	Divorce	5	Father S-mother	6-7
182	M	Separated	8	Mother	4-5
183	M	Divorce	11	Mother S-father	8-9
184	M	Divorce	5	Mother	2
185	M	Separated	7	Mother	6-7
186	M	Divorce	12	Father S-mother	1
187	M	Divorce	5	Mother S-father	8-9
188	M	Death (F)	8	Mother	1
189	M	Divorce	7	Mother S-father	8-9
190	M	Divorce	7	Mother	8-9
191	M	Death (F)	4	Mother	8-9
192	M	Divorce	5	Mother	2
193	M	Death (F)	1	Mother	8-9
194	M	Divorce	1	Grandparents	6-7
195	M	Divorce	8	Mother	8-9
196	M	Divorce	4	Father	0
197	M	Divorce	13	Mother S-father	8-9
198	M	Death (M)	11	Father S-mother	4-5
199	M	Death (M)	8	Father S-mother	0
200	M	Divorce	10	Mother S-father	8-9
201	M	Divorce	1	Father S-mother	2
202	M	Divorce	1	Grandparents	1
203	M	Divorce	10	Mother S-father	8-9
204	M	Death (F)	7	Mother S-father	1
205	M	Divorce	6	Mother S-father	2
206	M	Divorce	10	Mother	0
207	M	Divorce	5	Mother	1
208	M	Divorce	8	Mother	2
209	M	Death (M)	2	Father	4-5

Number of Case	Sex	Type of Broken Home	Years Broken	Lives With	Occupation of Father
210	M	Divorce	7	Mother	1
211	M	Death (F)	8	Mother S-father	6-7
212	M	Divorce	10	Mother S-father	8-9
213	M	Divorce	11	Mother S-father	8-9
214	M	Divorce	6	Mother	0
215	M	Death (M)	10	Aunt and Uncle	8-9
216	M	Divorce	11	Mother S-father	8-9
217	M	Divorce	5	Adopted parents	4-5
218	M	Death (F)	12	Mother S-father	2
219	M	Divorce	11	Aunt	1
220	M	Divorce	12	Mother S-father	8-9
221	M	Divorce	8	Mother S-father	1
222	M	Divorce	8	Mother S-father	3
223	M	Separated	2	Mother	6-7
224	M	Divorce	7	Mother S-father	8-9
225	M	Divorce	1	Mother S-father	2
226	M	Divorce	11	Mother S-father	8-9
227	M	Divorce	1	Mother	4-5
228	M	Divorce	2	Mother	4-5
229	M	Divorce	10	Mother S-father	3
230	M	Divorce	12	Grandparents	8-9
231	M	Death (F)	-1	Mother	0
232	M	Death (F)	5	Mother S-father	1
233	M	Divorce	12	Mother S-father	1
234	M	Divorce	5	Mother S-father	8-9
235	M	Death (M)	3	Father	0
236	M	Divorce	10	Mother S-father	8-9
237	M	Divorce	3	Mother S-father	2
238	M	Divorce	10	Mother	0
239	M	Divorce	2	Mother	6-7
240	M	Divorce	10	Mother S-father	1
241	M	Divorce	7	Mother S-father	2
242	M	Divorce	10	Mother S-father	2
243	M	Divorce	7	Mother S-father	8-9
244	M	Divorce	12	Father S-mother	6-7
245	M	Divorce	8	Father S-mother	6-7
246	M	Divorce	3	Mother S-father	2
247	M	Divorce	7	Mother S-father	8-9
248	M	Death (F)	9	Mother S-father	2
249	M	Death (F)	4	Sister	1
250	M	Divorce	4	Mother S-father	6-7
251	M	Death (F)	1	Mother	8-9
252	M	Death F	5	Mother S-father	4-5
253	M	Divorce	6	Mother	1

Number of Case	Sex	Type of Broken Home	Years Broken	Lives With	Occupation of Father
254	M	Divorce	8	Mother S-father	8-9
255	M	Death (F)	4	Mother	8-9
256	M	Divorce	3	Mother S-father	8-9
257	M	Divorce	10	Mother S-father	8-9
258	M	Death (F)	4	Mother	8-9
259	M	Divorce	9	Mother S-father	6-7
260	M	Death (F)	2	Mother	8-9
261	M	Death (F)	3	Mother	8-9
262	M	Divorce	9	Mother S-father	6-7
263	M	Divorce	9	Aunt	3
264	M	Divorce	7	Mother S-father	6-7
265	M	Divorce	8	Father	8-9
266	M	Divorce	11	Mother S-father	8-9
267	M	Separated	8	Mother	8-9
268	M	Separated	4	Mother	8-9
269	M	Divorced	1	Mother S-father	6-7
270	M	Divorced	1	Father S-mother	2
271	M	Death (F)	12	Mother S-father	2
272	M	Divorce	7	Mother S-father	2
273	M	Divorce	9	Mother S-father	8-9
274	M	Divorce	8	Mother S-father	1
275	M	Death (F)	3	Mother S-father	2
276	M	Divorce	2	Mother S-father	3
277	M	Death (F)	6	Mother S-father	8-9
278	M	Divorce	10	Mother S-father	6-7
279	M	Divorce	11	Mother S-father	8-9
280	M	Separated	6	Mother	2
281	M	Separated	6	Mother	2
282	M	Divorce	11	Mother S-father	8-9
283	M	Divorce	8	Father S-mother	4-5
284	M	Death (F)	6	Mother S-father	8-9
285	M	Divorce	8	Mother S-father	8-9
286	M	Divorce	8	Mother	0
287	M	Death (F)	13	Adopted Parents	2
288	M	Divorce	6	Mother S-father	4-5
289	M	Death (F)	5	Mother	0
290	M	Divorce	11	Mother S-father	8-9
291	M	Divorce	1	Mother	1
292	M	Divorce	5	Mother S-father	2
293	M	Divorce	5	Mother	8-9
294	M	Divorce	11	Grandparents	0
295	M	Divorce	5	Mother S-father	1
296	M	Death (F)	5	Mother	1
297	M	Divorce	13	Mother S-father	2

Number of Case	Sex	Type of Broken Home	Years Broken	Lives With	Occupation of Father
298	M	Death (F)	6	Mother	6-7
299	M	Divorce	9	Mother S-father	2
300	M	Divorce	6	Mother S-father	8-9
301	M	Divorce	11	Mother S-father	1
302	M	Divorce	11	Mother S-father	8-9
303	M	Death (F)	11	Mother S-father	2
304	M	Divorce	10	Mother S-father	8-9
305	M	Divorce	3	Mother	6-7
306	M	Divorce	9	Mother	8-9
307	M	Divorce	9	Mother S-father	8-9
308	M	Divorce	11	Grandparents	1

APPENDIX D

ORIGINAL SCHOOL DATA FOR STUDENTS
FROM BROKEN HOMES

Number of Case	Age	Grade	Grades Repeated	I.Q.	G.E. at		G.P.A.	Days Absent
					6.5	8.5		
1	13	8		107		9.4	2.7	0
2	13	8		97		8.0	2.7	4
3	13	8		107		8.6	1.6	10
4	13	8		114		9.9	2.0	17
5	13	8		98		7.8	2.3	1
6	13	8		102		9.2	2.6	2
7	13	8	8th	99		7.4	.4	18
8	13	8	8th	100		8.0	.9	14
9	13	8		107		8.7	2.6	8
10	13	8		98		7.9	1.8	4
11	14	8	1st	106		9.7	2.4	30
12	14	8		101		8.5	1.6	9
13	13	8		103		7.3	1.7	16
14	13	8		87		7.3	2.5	10
15	13	8	7th	105		8.7	2.0	0
16	13	8		120		9.7	1.7	15
17	13	8		115		9.2	2.7	15
18	13	8					2.1	
19	12	8		110		8.9	2.5	13
20	13	8		107		7.0	1.9	7
21	13	8		111		8.2	1.4	8
22	13	8		104		8.4	2.4	12
23	15	8	1st-5th	80		5.9	.6	17
24	13	8		118		9.8	3.0	3
25	14	8	3rd	98		8.4	2.4	5
26	13	8	8th	97		8.2	2.3	10
27	13	8		97		8.8	2.7	1
28	12	8		113		9.1	3.4	9
29	14	8	8th	98		7.9	1.4	30
30	13	8		104		8.2	1.7	8
31	13	8		109		8.6	1.9	23
32	14	8	2nd	105		8.2	1.6	12
33	12	8		104		8.1	1.5	15
34	15	8		83		7.8	2.7	5
35	13	8		123		10.6	2.3	33
36	13	8		113		9.4	2.5	2
37	13	8		98		8.4	1.7	15
38	13	8		112		8.6	2.9	2
39	14	8		95		7.9	1.7	14

Number of Case	Age	Grade	Grades Repeated	I.Q.	G.E. at		G.P.A.	Days Absent
					6.5	8.5		
40	13	8	8th	101		6.8	.8	12
41	13	8		98		9.2	2.0	2
42	13	8		108		9.8	2.9	10
43	13	8		112		10.0	3.8	8
44	13	8		104		9.7	3.8	4
45	13	8		108			1.4	30
46	13	8		104		8.6	2.0	16
47	13	8		100		9.4	1.7	8
48	14	8	2nd	89		8.0	1.5	0
49	13	8		103		8.2	3.1	7
50	13	8		105		7.6	1.6	2
51	13	8		96		8.9	2.5	8
52	13	8		118		9.6	3.7	5
53	13	8		125		10.0	3.6	13
54	13	8		106		8.5	2.0	9
55	13	8		103		7.9	1.8	14
56	13	8		120		9.5	3.0	15
57	15	8	1st-3rd	82		5.6	.5	6
58	14	8	7th	98		6.7	.5	17
59	13	8		103		10.0	3.1	23
60	13	8		120		10.3	2.3	10
61	14	8	2nd	87		7.2	.4	25
62	13	8	7th	96		8.2	1.0	7
63	13	8		115		9.1	2.8	4
64	14	8	7th	97		8.4	1.4	20
65	14	8		95		7.3	.9	17
66	13	8		102		8.3	1.7	6
67	14	8	5th	97		7.8	1.3	7
68	13	8		110		9.2	1.9	55
69	13	8					2.4	41
70	13	8		110		9.8	2.2	6
71	13	8		98		7.4	1.3	12
72	13	8	8th	105		8.5	.6	7
73	13	8		108		8.5	2.1	5
74	13	8		117		8.6	2.0	11
75	13	8	8th	103		9.8	1.9	1
76	13	8		107		8.1	1.2	12
77	13	8		97		8.0	2.0	4
78	13	8		109		9.6	2.5	2
79	15	8	1st-3rd	76		5.8	.7	15
80	13	8		105		10.6	3.2	13
81	13	8		117		9.6	3.0	1
82	13	8		109		10.4	3.3	12
83	13	8		99		8.4	2.0	15

Number of Case	Age	Grade	Grades Repeated	I.Q.	G.E. at		G.P.A.	Days Absent
					6.5	8.5		
84	13	8		102		7.9	1.3	25
85	13	8		123		9.6	3.1	3
86	13	8		94		7.9	1.8	8
87	12	7	4th	107	6.6		.9	15
88	12	7		92	6.1		1.7	1
89	12	7		104	6.0		2.7	9
90	12	7		109	6.7		2.4	9
91	12	7		112	7.6		2.3	23
92	12	7	7th	108	6.8		1.4	7
93	13	7	7th	82	3.9		.4	41
94	12	7		93	6.0		1.6	5
95	13	7		109	5.1		.4	8
96	12	7		98	6.4		1.2	30
97	12	7		106	5.4		1.6	6
98	12	7		94	6.0		1.6	12
99	13	7	3rd	106	7.4		2.6	1
100	13	7		91	4.9		1.0	34
101	12	7		108	6.8		1.9	15
102	12	7		104	5.4		2.7	8
103	12	7		108	7.0		3.1	00
104	12	7		107			2.1	0
105	12	7		101	5.9		2.1	8
106	12	7		97	6.0		1.8	6
107	12	7		110	7.9		2.4	3
108	12	7		110			2.0	7
109	13	7	1st-7th	95	6.5		.7	41
110	12	7		121	5.9		2.0	17
111	12	7		108	7.0		2.3	14
112	12	7		111	6.4		1.8	17
113	13	7		85	4.0		.6	13
114	13	8		127		10.5	2.6	0
115	14	8		100			1.4	0
116	12	7		99	6.1		2.0	18
117	12	7		111	6.8		1.8	17
118	12	7		128	8.4		2.6	0
119	12	7	7th	90	5.2		1.0	15
120	12	7	7th	96	5.1		.6	36
121	12	7	7th	93	5.6		.8	37
122	12	7		104	5.8		2.2	8
123	13	7	7th	94	5.7		.1	55
124	13	7		112	7.0		3.4	10
125	12	7		108	7.2		2.8	3
126	12	7		91			2.3	6
127	13	8		121			3.9	0

Number of Case	Age	Grade	Grades Repeated	I.Q.	G.E. at		G.P.A.	Days Absent
					6.5	8.5		
128	12	7	7th	83	4.6		.7	37
129	13	7		109	6.9		1.5	18
130	13	7		108	7.4		1.6	27
131	12	7		94	6.1		2.2	10
132	12	7		104	5.5		2.0	11
133	13	8		109			2.4	
134	12	7		99	6.2		1.4	2
135	13	7		111			2.0	4
136	13	7	7th	91	4.3		1.6	11
137	11	7		112	7.1		2.6	3
138	14	8	7th	71	4.8		.1	
139								
140	12	7		108	7.2		2.4	1
141	12	7		97	5.8		1.9	3
142	13	7		92			1.4	
143	12	7		98	7.5		2.1	14
144	12	7		97	4.7		1.8	
145	12	7		110			2.4	9
146	13	7	2nd	89	4.9		.8	15
147	12	7		109	8.0		3.8	7
148	12	7	7th	82	3.1		.5	21
149	12	7		87	6.0		1.8	9
150	12	7		117	7.6		2.9	8
151	12	7		119	8.5		3.5	6
152	13	7	4th	70	4.2		1.3	20
153	12	7		123	7.6		3.7	0
154	12	7		109	6.7		2.1	5
155	13	7		77			.5	
156	12	8		115		8.9		
157	14	7	2nd-7th	77	4.4		1.4	4
158	12	7		95			1.4	5
159	13	7	2nd	92			.8	7
160	13	7	2nd	81	4.3		.4	40
161	12	7		101	6.1		2.0	15
162	12	7		116	7.8		3.0	6
163	12	7		132	8.9		3.9	5
164	12	7		115	8.3		2.8	14
165	12	7		94	6.2		1.8	16
166	12	7		98	6.8		2.1	2
167	14	8	6th-8th	86		7.0	.3	34
168	14	8	1st-8th	99		8.0	1.0	27
169	14	8	7th	95		8.5	1.9	5
170	13	8	8th	105		8.2	1.3	27
171	14	8		110		9.5	2.0	20

Number of Case	Age	Grade	Grades Repeated	I.Q.	G.E. at		G.P.A.	Days Absent
					6.5	8.5		
172	14	8		94		8.5	2.0	1
173	13	8		114		10.8	2.7	3
174	15	8	1st	90		9.0	1.6	15
175	15	8	2nd	93		7.9	1.5	7
176	14	8		106		9.0	1.9	14
177	13	8		112		7.4	1.8	0
178	15	8	2nd-8th	85		8.2	.2	8
179	13	8		124		10.0	3.1	7
180	13	8		112		9.0	2.4	0
181	14	8	7th	99		9.4	1.0	8
182	13	8		94		7.8	.9	5
183	15	8	1st-8th	70		5.8	.5	32
184	14	8	3rd-7th	97		8.4	1.3	27
185	13	8		115		9.5	3.0	12
186	15	8	3rd-7th	98		6.4	1.0	19
187	14	8		105		8.3	2.0	8
188	13	8		114		10.2	3.1	10
189	14	8	2nd-7th	85		6.5	.5	13
190	14	8	7th	102		8.6	1.0	36
191	13	8		105		9.6	2.0	8
192	13	8		110		9.8	2.3	8
193	13	8	8th	105		9.4	.8	12
194	12	7		96	6.4		1.2	20
195	14	8	1st	85		7.2	1.0	4
196	15	8	1st-5th	103		8.8	2.7	6
197	15	8		122		10.3	1.6	21
198	14	8	4th	81		6.8	1.2	7
199	13	8		122		10.5	3.5	20
200	14	8		100		9.2	1.9	9
201	14	8	8th	97		9.3	1.7	8
202	15	8	2nd	96		8.8	1.6	9
203	15	8	1st-4th	90		8.3	.7	36
204	13	8		109		10.0	2.8	3
205	13	8		116		8.5	1.3	7
206	13	8		117		9.4	1.5	19
207	13	8		109		9.5	3.0	6
208	15	8	3rd-8th	82		5.9	.9	10
209	15	8	1st-8th	86		6.2	1.7	6
210	13	8		113		10.2	2.7	2
211	15	8	1st-8th	98		6.4	1.3	7
212	13	8		125		9.6	2.2	20
213	14	8	7th	80		9.4	1.6	2
214	13	8		116		10.9	3.6	5
215	13	8		109		8.7	2.1	4

Number of Case	Age	Grade	Grades Repeated	I.Q.	G.E. at		G.P.A.	Days Absent
					6.5	8.5		
216	13	8	Trial-7	109		9.4	1.5	9
217	14	8	4th	93		9.6	3.0	2
218	14	8		109		10.4	2.9	4
219	14	8		100		8.4	1.6	1
220	12	7		112	8.0		3.0	18
221	12	7		115	8.9		2.8	16
222	12	7	7th	86			.8	3
223	12	7		102	6.5		1.8	9
224	13	7	7th	90			.3	
225	13	7		90	5.6		.9	16
226	14	7	7th	70			1.3	ex.
227	12	7		116	9.1		2.2	0
228	12	7	1st	94	4.5		.9	3
229	12	7	7th	102	6.3		1.2	7
230	13	7		102	7.6		2.0	13
231	13	7		102	6.9		2.4	8
232	13	7	7th	95	4.7		.9	13
233	12	7		119	8.7		1.8	6
234	13	7	7th	78	4.6		.2	16
235	12	7		123.	9.2		1.8	5
236	14	7	1st-3rd	60	3.5		.2	
237	12	7		105	4.9		2.1	5
238	12	7	7th	103	5.7		.7	50
239	12	7	7th	98	6.5		.3	34
240	14	7	3rd-7th	97	5.2		.9	37
241	14	8		96			1.3	
242	12	7		118	6.6		2.9	7
243	14	7	1st-7th	85	4.5		.2	56
244	13	7	1st	75	3.8		.5	1
245	14	7	7th	84	4.4		.9	ex.
246	12	7		96	5.1		.8	
247	13	7	1st	96	4.6		.5	20
248	12	7		116	8.4		1.8	5
249	14	7	7th	89	4.9		.5	6
250	13	7	7th	85	5.5		1.3	13
251	12	7		110	7.2		1.6	8
252	12	7		101	6.2		2.2	0
253	12	7		130	9.2		2.9	2
254	13	7		94			1.9	
255	14	8	7th	87		7.2	.3	ex.
256	12	7		107	6.0		1.8	5
257	13	7	7th	85	4.4		.4	
258	15	7	1st-6th	63	3.7		.3	52
259	12	7		104			1.8	1

Number of Case	Age	Grade	Grades Repeated	I.Q.	G.E. at		G.P.A.	Days Absent
					6.5	8.5		
260	13	7	1st	74			.4	9
261	15	8	1st-8th	60		5.9	.2	30
262	13	7	1st	95	6.2		2.6	9
263	12	7	7th	89	5.4		.4	7
264	12	7		90	5.4			
265	12	7		119	7.2		2.1	4
266	14	7	7th	68	4.6		.3	43
267	13	7	1st-7th	85	5.4		1.1	10
268	12	7		102	7.8		2.4	9
269	13	7	7th	103			1.6	0
270	13	7	1st	88			.7	10
271	14	7	1st-7th	79	4.5		.1	4
272	13	7		111	7.3		2.3	7
273	13	7	1st	92	5.1		.6	1
274	12	7		103	5.6		1.3	3
275	13	7	2nd	102	7.2		2.9	2
276	13	7	7th	89			.7	26
277	13	7	5th	93	6.3		1.2	8
278	13	7	3rd	105	6.0		1.0	11
279	13	7	1st	69	4.2		.5	8
280	13	7		113	7.6		2.1	14
281	13	7	1st	69	3.6		.6	2
282	13	7	1st-7th	89	5.4		.8	3
283	12	7		114	7.6		2.1	10
284	12	7		96	5.8		1.4	16
285	13	7	1st	81	4.7		1.0	5
286	12	7		117			2.1	
287	13	7		107	6.6		3.0	2
288	13	7	1st	91			.9	10
289	12	7		104			2.5	6
290	12	7	7th	113	5.7		.8	19
291	12	7		111	6.9		1.6	7
292	13	7		101	5.7		1.1	15
293	13	7	7th	105	6.0		1.0	33
294	12	7		120	9.7		2.7	3
295	12	7		108			2.3	
296	12	7		109	6.7		1.5	5
297	14	7	7th	88	5.7		1.2	7
298	12	7		107	4.9		1.4	15
299	12	7		86	4.4		.5	
300	12	7		121	8.2		1.9	25
301	12	7		111	6.1		1.7	10
302	13	7	2nd	85	4.5		.8	16
303	12	7		98	5.8		2.4	0

Number of Case	Age	Grade	Grades Repeated	I.Q.	G.E. at		G.P.A.	Days Absent
					6.5	8.5		
304	13	7	2nd	84	5.1		.7	33
305	13	7		102	6.0		1.6	7
306	14	7	3rd-7th	91	4.3		.5	2
307	12	7	7th	97	5.2		.4	3
308	13	7	1st	62			.3	

APPENDIX E

ORIGINAL DATA FOR STUDENTS
FROM NON-BROKEN HOMES

No. of Case	Sex	Age	Grade	Grade Repeat	I.Q.	6.5	8.5	G.P.A.	Days Absent	Occu- pation of Fa.
1	M	13	7		121	9.5		2.5	5	0
2	M	12	7		119	8.3		2.7	2	1
3	M	12	7		106	7.2		2.4	7	1
4	M	12	7		115	8.2		2.9	6	0
5	M	12	7	7th	106	6.5		1.1	0	4-5
6	M	12	7		111	7.5		2.5	0	4-5
7	M	12	7		107	7.6		2.6	9	6-7
8	M	13	7	7th	93	5.7		1.5	10	6-7
9	M	13	7		109	9.2		3.6	8	1
10	M	12	7		93	4.8		1.3	10	3
11	M	12	7		119	9.4		3.4	5	1
12	M	14	7	4th	97	6.1		1.4	5	4-5
13	M	12	7		121	8.3		2.5	9	6-7
14	M	12	7		107	8.3		2.9	6	0
15	M	12	7		112	8.1		2.3	22	6-7
16	M	12	7		113	8.9		2.9	5	3
17	M	12	7		112	7.6		2.8	8	1
18	M	12	7		106	7.6		3.3	5	0
19	M	12	7		100	6.9		1.8	8	1
20	M	12	7		111	8.6		2.6	7	1
21	M	12	7		107	7.1		2.3	20	8-9
22	M	12	7		99	7.1		1.7	1	4-5
23	M	12	7		126	6.6		3.7	2	1
24	M	12	7		96	5.1		1.7	7	0
25	M	12	7		109	5.7		1.6	5	1
26	M	12	7		117	8.8		2.8	10	0
27	M	12	8		123		10.5	3.9	2	0
28	M	13	8		98		7.9	1.6	2	4-5
29	M	14	8		107		9.0	2.4	7	2
30	M	11	7		105	7.8		2.5	7	3
31	M	13	8		104		8.8	1.9	4	4-5
32	M	13	8		121		10.3	3.7	4	3
33	M	13	8		114		9.7	2.4	4	0
34	M	13	8		125		10.1	2.8	5	4-5
35	M	13	8		109		10.1	2.9	1	1
36	M	13	8		110		10.0	2.5	7	0
37	M	13	8		111		8.8	1.8	10	4-5
38	M	13	8		112		9.6	1.8	8	1
39	M	13	8		106		9.1	3.0	1	4-5

No. of Case	Sex	Age	Grade	Grade Repeat	I.Q.	6.5	8.5	G.P.A.	Days Absent	Occupation of Fa.
40	M	13	8		105		10.2	2.7	7	1
41	M	13	8		135		11.1	3.0	0	0
42	M	13	8		101		8.7	2.4	2	1
43	M	13	8		111		8.8	2.8	0	4-5
44	M	14	8	8th	115		8.9	2.2	11	2
45	M	13	8		98		9.5	2.6	0	0
46	M	12	7		97	5.8		1.9	14	1
47	M	13	8		120		9.7	2.4	18	2
48	M	13	8		120		9.8	2.5	8	1
49	M	13	8		118		9.8	4.0	0	0
50	M	13	8		123		9.9	2.7	3	8-9
51	M	13	8		101		8.7	2.0	4	0
52	M	13	8		109		9.6	3.0	2	0
53	F	12	7		113	7.0		3.3	4	4-5
54	F	12	7		117	8.4		2.6	25	4-5
55	F	12	7		120	8.1		2.8	4	1
56	F	12	7		124	9.9		4.0	6	0
57	F	12	7		119	9.0		3.7	0	4-5
58	F	12	7		129	9.1		3.9	12	0
59	F	12	7		110	7.4		2.6	3	1
60	F	12	7		113	7.3		3.3	5	4-5
61	F	12	7		100	6.5		2.1	24	6-7
62	F	12	7		124	8.1		2.8	1	1
63	F	12	7		128	9.3		3.4	6	1
64	F	12	7		119	8.9		3.2	7	1
65	F	12	7		118	9.5		3.9	12	0
66	F	12	7		105	5.2		2.0	3	0
67	F	13	7	7th	102	7.1		1.3	14	2
68	F	12	7		115	7.6		3.0	1	3
69	F	12	7		108	7.0		2.3	5	4-5
70	F	12	7		125	9.4		3.8	0	4-5
71	F	12	7		108	7.0		1.9	23	1
72	F	12	7		101	6.6		2.5	1	1
73	F	12	7		107	8.1		3.3	8	1
74	F	12	7		101	6.7		2.6	6	4-5
75	F	12	7		122	9.3		3.8	1	6-7
76	F	12	7		126	8.4		2.7	2	4-5
77	F	13	8		97		9.5	2.5	1	6-7
78	F	12	8		109		10.0	3.1	6	1
79	F	13	8		125		11.3	3.8	9	0
80	F	13	8		113		8.6	2.5	1	2
81	F	13	8		111		9.3	3.5	5	6-7
82	F	13	8		107		8.8	2.5	12	1
83	F	14	8	5th	97		8.5	2.3	11	4-5

No. of Case	Sex	Age	Grade	Grade Repeat	I.Q.	6.5	8.5	G.P.A.	Days Absent	Occu- pation of Fa.
84	F	12	8		127		10.4	3.4	3	0
85	F	13	8		132		11.2	4.0	4	4-5
86	F	13	8		118		10.4	3.0	14	0
87	F	13	8		97		7.7	2.1	17	2
88	F	13	8		107		8.5	2.1	9	4-5
89	F	13	8		116		9.2	2.5	1	4-5
90	F	14	8	3rd	113		10.3	3.2	0	4-5
91	F	13	8		127		10.8	3.7	7	1
92	F	13	8		112		9.3	2.5	11	1
93	F	13	8		113		8.6	2.9	5	8-9
94	F	13	8		115		9.9	2.9	7	4-5
95	F	14	8		101		9.2	1.3	33	6-7
96	F	13	8		121		10.8	1.9	11	1
97	F	13	8		118		9.5	2.9	10	4-5
98	F	13	8		121		10.8	3.9	3	4-5
99	F	13	8		138		11.6	3.7	3	0
100	F	13	8		109		10.3	3.5	13	1